

BITS, BYTES & PIXELS

LIMA 99/4H USERS GROUP



JUNE 1990 VOLUME 6 #6

AVAILABLE VIBED TAPES OF THE 1990 TI MUG CONFERENCE

Any user group or any individual who is a paid member of the Lima Ohio User Group can obtain, for the cost of media and postage, video tapes showing all the formal presentations at the May 26, 1990 TI Multi User Group Conference at Lima Ohio. The set of 3 VHS tapes includes approximately 16 hours of viewing, showing both the speakers and direct computer video and audio output of demonstrated software. To obtain these videos, send three VHS tapes and \$3 for postage, OR (not and) \$15. We buy the tapes and pay the postage for those sending \$15. Our address is:

Lima Ohio User Group
P.O. Box 647
Venedocia Ohio 45894
U.S.A.

The contents of these three video tapes are shown below. Numbers refer to the VHS tape counter.

VIDEO TAPE #1

- GARY BOWSER- 25 Rambo, Review Module Library box.
- JIM HORN- 1430 Giving spare computers to schools.
- BRUCE HARRISON- 2185 Secrets of assembly language programming of music on the 99/4A.
- USER GROUP OFFICERS MEETING- 2855 Video taping group meetings- a combined Ohio area newsletter or central article data base.
- BUD MILLS- 3720 Memex P-Brain and Horizon ramdisks.
- GARY TAYLOR- 4405 Demonstration of TI's Compact Computer 40 TI's Hex Bus peripherals and a Mechatronics Hex Bus drive.
- CHRIS BOBBITT- 4955 Midi interface ASGARD mouse Rock Runner game

VIDEO TAPE #2

- BARRY TRAVER- 30 The next issue of GENIAL TRAVELER.
- JIM PETERSON- 1344 Don Shoreck KANA FILER that speaks and writes (with TEII) Japanese and drills vocabulary.

- CHARLES GOOD- 1620 AIRTAXI by Don Shoreck an individually customized geography game.
- CHARLES GOOD- 1880 The new features of FUNNELWEB v4.30
- BARRY TRAVER- 2410 A beginner's tutorial on how to add assembly CALL LINKs to XB programs.
- CHRIS BOBBITT- 3220 SPELL-IT! and other ASGARD software, comments on PRESS.
- PAUL SCHEIDENANTLE- 3860 Graphic utilities for use with PAGE PRO v1.6. Create a 1 page ad.
- DEERY MILLER- 4535 Future software for the Geneve to be published in 9640 NEWS.
- MLIO TV35- 5220 Coverage of the conference on the evening news

VIDEO TAPE #3

- KARL ROMSTEDT- 80 Very friendly general LOADER and label printing software in XB with assembly subroutines.
- MAROLD HOYT- 655 Useful applications of Steve Karasek's SUPER BASIC.
- IRWIN HOTT- 2050 Using ALSAVE to embed assembly code within an XB program.
- BILL HUDSON- 2905 An assembly language prescan for XB.
- MULTIPLAN TUTORIAL- 3235 Presented by the Great Lakes Computer Group.

†††DNE†††

BB&P PUBLICATION SCHEDULE

Yes, it has been awhile since the last issue of BB&P. However, we are not late in publishing this current issue. Our information box states that BB&P is published 10 times per year, monthly except July and August. The issue previous to this was dated "May 1990", but actually was mailed out in late April. This is dated "June 1990" and is going in the mail in late June. The next "September 1990" issue may go out in late August. We are just trying to spread out our publication dates to even out the two missing summer months, to allow us to recover from the work of organizing the 1990 MUG Conference, and to give the BB&P editor time to go on a family vacation leaving his TI at home.

†††DNE†††

COMMENTS CONCERNING THE MAY 26, 1990 MUG CONFERENCE by Charles Good

The registration book was signed by 210 people. I know that not all those present signed in. There were lots of folks walking around with no name tags. Total estimated attendance is 250, down from about 300 at the 1989 MUG Conference.

I will leave it to others to write about the "great success" or lack of success of the Lima Conference. I understand that the Conference will receive favorable commentary in Micropendium and in Computer Buyer's Guide. Honestly I can't think of anything that we haven't already done to encourage people to attend. The Conference is free. Door prizes and the opening of the Lima UG library for copying provide positive incentive for people to attend. I suspect that the decrease from last year's attendance is an indication of the declining numbers of individuals who participate in our hobby. Attendance at ALL the TI shows starting at least with the Nov. 1989 Chicago Faire has been down from year ago levels, sometimes drastically down.

On the positive side, I was delighted with the appearance of several "closet TI computer" people from the Lima area. We managed to convince local radio and TV stations and the local newspaper to give us some free pre-conference publicity. Ten or fifteen local "closet" people heard about the conference from the local media and came out to see what was happening. I also pleased to report that the major dealers all reported superb sales. Apparently people were spending lots of money, particularly on big ticket items. Spending money means investing in the future, and the future at the Lima MUG Conference does NOT mean MS-DOS or other non-TI machines.

IS THE AVPC CARD INCOMPATIBLE WITH SOME ASSEMBLY STUFF SHOWN AT THE CONFERENCE? PROBABLY NOT. Some technical problems occurred in one of the demonstration rooms because the system available to speakers included an AVPC 80 column card. This card was needed for the 80 column part of the Funnelweb v4.30 demo given in that room. Barry Traver could not get some of his XXB assembly routines to run from the AVPC card in 32 or 40 column mode. Also Chris Bobbitt, of Asgard, couldn't get the Asgard mouse software to work properly. Chris went so far as to note that 80 column card that Asgard will sell sometime in the future will be totally mouse compatible. Had I known of these incompatibility problems in advance, I probably could have done something about them. With the AVPC epron #1, there is a software fix with sets up the 99/4A to ignore the AVPC. With the newer AVPC epron #2, there is a certain keypress you use when the console is reset to make the 99/4A behave as if the AVPC wasn't there. If I would have told Barry and Chris about the magic "reset keypress", they probably wouldn't have had any problems with our AVPC equipped demonstration room system. I apologize.

\$\$\$DONES\$\$

THE NEW FEATURES OF FUNNELWEB v4.30 described by Charles Good Lima Ohio User Group

Funnelweb v4.30 was officially released at the May 26 Lima MUG Conference. The main features new since v4.21 relate to an enhanced DISK REVIEW.

You can now, using the configuration utility, configure FNB to immediately boot DISK REVIEW instead of a central menu, or if you keep your finger in the space bar you can instead boot a central menu. You can also configure FNB the old way to always go directly to a central menu. The choice is yours. This "immediate boot of DISK REVIEW" can happen when loading FNB any way EXCEPT as LOAD from extended basic. If you boot from XB, you go through the usual XB user list.

The main changes to FNB are enhancements to the 80 column DISK REVIEW. Later, the 40 column DISK REVIEW will be rewritten to incorporate some of these enhancements. The 80 column DISK REVIEW is now a complete disk manager and sector editor, and can give you immediate access to all software configured into either central menu.

When 80 column DR first appears on screen you are given these options:

```
Disk Dir (1-9)
Colors (0)
D-Utills (D)
Fnl'Web (F)
Exit (Ctl =)
```

You can cycle through the configured FNB color combinations by pressing 0 (zero) repeatedly, as is the case from other parts of FNB.

Pressing "F" from the first DR menu brings up a simultaneous display of BOTH central menus. The arrow keys (E/X) move the cursor up and down the list. Pressing (enter) runs the selected central menu program.

CTRL/= will exit DR and bring up one of the central menus. The same is true for S(how) D(irectory) in the text editor. Pressing CTRL/= will bring you back to the text you are editing.

You can bring up the directory of any disk drive or ramdisk drive emulation by pressing a number, 1-9. Several new options are available once a disk directory is on the screen. You can now T(tag) or U(ntag) files, perform an A(action) on all tagged files, and I(nspect) the sectors of a file. Move the cursor next to a file name and press "T" to tag the file. A little mark appears after the file name. You can tag all files in the directory at once by pressing CTRL/T. You can untag the file under the cursor bar by pressing "U". You can untag all files that are currently tagged by pressing CTRL/U. You can bring up a menu of

possible Actions) to perform on all the tagged files by pressing "CTRL/A". This is what you get:

- C(copy)
- P(protect)
- U(unprotect)
- D(delete)

The P, U, and D options need no explanation. D(delete) requires you to verify that you really do want to delete each and every tagged file, so that the chances of an error on your part are reduced.

The C(copy) option is really neat! You are given the opportunity to designate one, or several destination drives. You can then COPY TO MULTIPLE DRIVES, ALL WITH A SINGLE PRESS OF THE <ENTER> KEY! You can put a master disk in DSK1., tag all files, and file copy the entire master disk to drives 2, 3, and 4 all in one smooth operation. It is necessary to have preinitialized disks in the destination drives. DR will stop the copying process and give you a "device error" message if it detects an uninitialized disk. Another limitation is that single drive copying is not supported. There are no "take out the master disk and insert the copy disk" messages.

You can, if you want, copy single files one at a time directly from the disk drive menu without bothering to T(tag) the file to be copied. This is neat too. You can copy the single file to the destination drive UNDER A DIFFERENT NAME if you want. Also, you can copy a file back to the same drive using a different file name. Very few disk managers permit you to copy a file back to the master disk under a different name.

From the disk directory display you can move the cursor bar over a file name and press "I" to I(Inspect) disk sectors. This brings up the sector editing options.

1. Sector edit
2. File search
3. Disk search

Items 2 and 3 allow you to search for a specified ASCII or HEX string on the disk. Item 2 searches only those disk sectors that contain the file marked by the cursor bar. Item 3 searches the entire disk starting at sector zero. You can include a wild card character within your string. Once a match is found you are given the opportunity to edit the sector, continue searching, or exit back to the disk directory display.

When you edit a sector by selecting "1. Sector Edit" from the I(Inspect) menu, you get this submenu:

- 1 Volume information
- 2 File descriptor
- 3 Initial sector
- 4 Offset in file
- 5 Absolute sector

Selecting 1 brings up sector zero for editing. Selecting 2 brings up for editing the file descriptor sector of the file name under the cursor bar. If you select 3, you can edit the actual first sector of the file marked by the cursor bar. Item 4 allows you to inspect a file beginning in the middle of the file, X many sectors from the beginning of the file. For items 3 and 4 you are told how many sectors you are into the file, and CTRL/N brings up the N(ext) sector of the file even if that sector is part of a fractured file and thus somewhere else on the disk. Item 5 ignores the file name under the cursor bar and selects a disk sector by absolute number.

When a sector is brought onto the screen, the display is simultaneously in ASCII and HEX. The ASCII window is at the bottom of the screen and is a rectangle that stretches across the full width of the screen. Text (ASCII characters) is very readable looking very much like, well, text, in this long rectangular 80 column display. Keypresses for the options available all require the CTRL key and resemble as much as possible those of Birdwell's DSKU and Funnelweb's Disk Patch. The options from a disk sector display are:

C-ESDX Cursor

C-B/N Back/Next one sector

C-A/H Ascii/Hex moves the cursor between the two windows.

Changes in one window are immediately updated in the other window, and changed bytes are shown in the alternate color combination.

C-W Writes the altered display back to the disk.

C-MRO displays the M, R, and O buffers.

When a sector is read in for screen display, a spare copy of this screen display is stored in the O(Original) buffer. Pressing CTRL/D restores to the screen the O(Original) sector to undo editing changes. Pressing the CTRL/M M(akes) the currently displayed and edited screen the contents of the M buffer. Pressing CTRL/K K(ealls) the M buffer back to the screen. You can use CTRL/M-R to move sectors. Read in a sector and put it in the M buffer. Then read in a second sector to the screen, R(ecall) the M buffer to the screen and press CTRL/W to W(rite) the M buffer to the second sector.

Selecting "D" from the original DR powerup menu brings up the following disk utilities options:

- Format Disk
- Validate Disk
- Rename Disk
- Sweep Disk
- Myarc RD endk

You use the arrow keys to move the cursor bar up and down this list, and press <enter> to select the option under the cursor bar. Format works with 80 track drives if your hardware supports such drives (a Myarc disk controller with a special eeprom is needed). When the disk is formatted, you are asked if you want to validate. You can bypass validation if you are in a hurry. Validate Disk gives you a display of

the sector being checked, the sector number of the most recently found bad sector, and the total number of bad sectors. The Myarc RD (randisk) screen option is not operative in FWB v4.30.

One other new feature of the v4.30 DR is that sectors used and free are properly displayed for those with 80 track drives. Apparently other disk managers are off by a few sectors when displaying this information from a disk formatted in quad density.

Well, there it is folks, a really slick 80 column **DISK REVIEW** for use by those with Geneves and 80 column cards. Some of the disk management features described here are not found elsewhere. Soon, you 40 column users will also have some of these enhanced features in a rewritten 40 column **DISK REVIEW**. To do this, Tony McGovern will have to decrease the size of the 40 column VIEW buffer (currently 17K) to find space to fit in new stuff. Which of the new features do you 40 column users want to see in the future 40 column **DISK REVIEW**, or do you want to keep the View buffer at 17K? Send Tony McGovern your response to these questions. There isn't room to put all the new stuff in the 40 column DR. What is your pleasure??

11BONE11

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TI Fair Report
By: Andy Fruen

The 3rd annual Lima TI Fair was held May 26, 1990 in the cafeteria of Cook Hall. As far as I could judge, it was a success. Our fair is lucky in that attendance has been fairly consistent over the three years. Other fairs are suffering from drops in attendance. Several of these fairs appear to lack great organization. I do not wish to brag (well, not TOO much), but our group received great comments on the fair, and on its ORGANIZATION! This topic had been discussed by our group recently, in fact. It appears that the smaller number of people and committees you have, the better the show. We have about 5 regular members at our meeting, and we can get it done. When someone asks for something, it can get done because there are no channels to go through. We also did not offer a catered dinner. Instead, we had a dutch treat pizza party which, although I didn't get to attend, I heard went pretty well.

The following is a listing of the various tables we had at our show, and what each table was offering.

The Lima table had a new Funnelweb version, Don Shoreck's educational language programs, and we took orders for taped demos of the conferences. Of course, our library was there for copying by user groups.

The Great Lakes group was there. They had a few modules to sell, but the real focus was their financial software. A demo of this was running.

The Kawartha group was there as a representative of Comrodine. Comrodine manufactures a lot of graphics stuff and are currently branching out into great games.

The North Coast and TI Chips groups had a table. They, too had modules to sell. Also held here was a raffle by the group for a modem. This was sponsored by their group. Raffle tickets were available for sale.

CONNI was at our fair also. This group had tons of disk software, mainly fairware. This included graphics, music, games, and utilities. Their SLIDESHOW disks were also sold.

Another group that was there was the Hoosiers. They were selling some TI hardware. They also had neat buttons with messages such as "I love my TI". Also available were professional looking Fairware and Telco manuals.

The huge Chicago group had a few tables. The main focus was a tremendous selection of software and hardware. DD/DS drives could be had for \$25! The MBX system was also being sold (if anyone knows more, please tell me about those. I am interested.)

A fascinating new (I believe it's new, anyway) product was on display at the WAS Controls table. It is a hardware

project called The Extended BASIC module expander. It allows you to have Extended BASIC plus 5 other cartridges in one shell. You must provide all the GROMs. A rotary switch selects which module will run. These can be had for a total of \$28 which includes shipping. I don't know if these work with a Navarone widgeit, but I doubt it.

At the Pittsburgh user group table were flyers regarding the new hard drive controller. It is available from Electronic Systems Development Corp. The flyers claim the EDS card controls "4 hard drives and 4 floppy drives!" It can use SS/SD to the 1.44MB 3 1/2 drives. The DSR is on EPROM so it can be updated, and separate internal/external drive connectors. It adds pathnames and BASIC commands, and it is claimed to be 100% TI compatible. No price is given, but I asked for more information and will report on it as I get it.

Rancharged computers was offering many old games, along with new products like TI-Artist + and The Missing Link. They also had a wide array of joysticks.

Of course, L.L. Conner was there. From him you could buy several books, modules, disks, and joysticks. He also had Geneves, 80 column cards, several other cards, and the Prototype board. This board lets TI hardware developers create their cards on a pre-made board.

Jim Peterson brought his Public Domain software. These were \$1.25! Towards the end of the day, he had a "suicide" sale. Almost all of his copyrighted Tigercub software went for \$0.25 each!

OPA was there displaying their current TI hardware, including their super cartridge expander.

Bud Mills was there selling the Horizon ramdisks and other P Box cards. I'm not sure if the RAMBO was at the Fair or not.

Paul Scheidewantle was with Harry Brashear. They had a lot of Paul's work which includes some games, and tons of graphics stuff. Also for sale was a guide to Home Publishing on the TI.

Asgard had a table and was displaying some of their new software including Rock Runner and Spell It! Also displayed was the Casin keyboard which could be controlled by the TI. When asked about the new MIDI interface, Chris Bobbitt said that the TI had the capability all the time! It was just never explored.

Jim Horn, a sysop on BBS's was selling TI hats, books including The Orphan Chronicles, and just about every issue of MICHUpendium.

As for the demonstrations given in our two conference rooms...

Charles Good demoed Air Taxi, and other education programs from Don Sherock and the latest Funnelweb v 4.3 with a newer Disk Review program.

Barry Traver presented ways to combine BASIC and Assembly.

OPA's Garry Bowser, Asgard's Chris Bobbitt, and Bud Mills Services Bud Mills all demonstrated the latest hardware/software from their respective companies. Of course, each demonstration was held separately.

Jim Horn gave a talk on ways to get owners of TI's who don't use them to give them to places such as schools. This is a worthwhile cause, and is TAX DEDUCTIBLE!

There was quite a bit on Assembly programming. Bruce Harrison spoke on programming music in Assembly, and Bill Hudson showed an Assembly prescan routine.

The magazines-on-a disk, 9640 News and Genial TRAVELER were showed by Beery Miller and Barry Traver, respectively.

Utilities were also displayed. Carl Roastedt showed some label makers, Irwin Hott showed how to use ALSAVE, and Harold Hoyt gave a presentation on using Super BASIC.

A history demo was given by Gary Taylor. It was a bit of a history lesson to see the TI CC-40, the compact computer. This was termed the 4A "little brother," along with the 99/2. Also showed were items used with the Hex-bus interface.

Another demo of interest was the demonstration of Page Pro v 1.5 and some utilities to use with it. The demo was given by Paul Scheidewantle.

Finally, a typical fair-style discussion of problems with user groups was held with user group officers,

All in all, it was quite an event. I like fairs because they give me a chance to keep on top of the TI community and actually use things before I buy them. That is important to me. Also, they're FUN! There are those who think spending a day around computers isn't fun, but oh, well. As long as the attendees had fun.

And they did. I myself received numerous comments, none of them bad, about our show. Charlie Good also noted how many positive comments he had received. I believe there was over 200 people at our show. Considering the size of Lima and our group, that is a very good outcome. Hope to see everybody next year.

!!DONE!!

SPELL IT!

reviewed by Charles Good
Lima Ohio User Group

A few months ago I wrote an article about dedicated spell checking computers such as the Franklin Spelling Ace. I still think these devices are useful for single word checking as a document is created, and recommend their use. With the recent release of Asgard's SPELL IT!, we now have a really useful whole document spell checker that can be used with Funnelweb or TI-Writer. Having used the Dragon Slayer spell checker, and the WriterEase dictionary, I can say without reservation that Asgard's SPELL IT! is superior to the other two spell checking programs available for our computers.

The Dragon Slayer spell checker has a small main dictionary, only 20000 words. It is eternally slowwww in checking a document. Once spelling errors in a document are corrected by Dragon Slayer, you usually have to load the document into Funnelweb and reformat the whole thing paragraph by paragraph. This is because Dragon Slayer splits lines each time a correction is made. The result of each spelling correction is an INSERT without a subsequent REFORMAT.

The main problem with the 50000 word WriterEase dictionary is that you have to use it with WriterEase. WriterEase only works in 40 columns and does not have all the little TI-Writer word processing enhancements found in Funnelweb. WriterEase is really no better than the original TI-Writer except that it comes with a spell checking dictionary. My main complaint about WriterEase is that you can't load it from ramdisk or hard drive. The WriterEase disk is ultra protected, and you must use the original system disk (it can't be copied) only in DSK1. What a pain! Another problem with the WriterEase dictionary is that the user dictionary it creates uses up enormous amounts of disk space. I don't know why, but you only get three or four words in each disk sector of the WriterEase user dictionary.

SPELL IT! consists of the program and several separate dictionaries. It is unprotected, so you can put the program on a ramdisk or hard disk. HOWEVER, the version 1.05 (revised from the initially released v1.01) that I have only works if you put the word list dictionaries themselves on floppies or a hard drive. I have the SPELL-IT! program on my Horizon, but due to space limitations on the Horizon I run the dictionary word lists off of a DSDD floppy. The addendum that came with v1.05 states that "The program now functions well with the HFDC and all RAM-disks (except, apparently, the Horizon RAM disks under some configurations)." This is a rather important "except". As I understand it, the latest versions of ROS have problems with SPELL-IT! dictionaries. An attempt is being made by the software author, Jim Reiss, to correct this problem and an updated version is expected soon. Before you purchase SPELL IT!, check with Asgard about the current state of Horizon ramdisk.

When you first run SPELL-IT!, you are asked for the drive number and name of a DV80 text file. All word processors written for the 99/4A can, and usually do, create text files of this type. SPELL-IT! then scans the document and develops a "unique word list" of all the different words in the document. In creating this list, SPELL-IT! ignores punctuation, capitalization, single letters, numbers, and format commands (words that begin with a period). Next, SPELL-IT! compares each of the unique words to the words found in its 19 dictionary word lists and your USER dictionary word list. All of this document scanning and word list comparison takes place in one continuous operation without user intervention, unless it is necessary to swap dictionary disks. A 20 page document probably doesn't have 10 times as many unique words as a 2 page document. The same words tend to be repeated in any text. Thus, it doesn't take SPELL-IT! 10 times as long to check the 20 page document, compared to a 2 page document. The SPELL-IT! program is supposed to recognize common plurals as well as "ed" and "ing" suffixes as valid. The word "work" in a dictionary word list will recognize work, works, working, and worked in a document as correctly spelled.

SPELL-IT comes as a DSDD disk version on one disk (\$70), a SSSD version on 3 disks (\$25), and a hard disk version on 10 disks (\$35). The hard disk version has 200000 words in its dictionaries, the other two versions have 20000 words. SPELL-IT! requires all 19 of its own dictionary word lists, plus the USER word list to be in the same drive. This means that single density users (SSSD or DSSD) must switch dictionary disks in and out of the specified dictionary disk drive during the spell checking process. SPELL-IT! can be configured to expect all its dictionaries to be in any drive you want, but they must all be in this drive. It would be nice for single density users if SPELL-IT! could be configured to expect the first dictionary word lists in one drive and then automatically go to another drive for the rest of the dictionary word lists. This would minimize disk swaps for single density users with multiple drives.

After spell checking, the user is given the opportunity to do the following with each of the unrecognized words.

- A) Add to the user dictionary
- C) Correct the word
- L) Look for similar words in the dictionary word lists
- N) Next word, performs no action on the unrecognized word
- P) Previous word. You can scan back and fourth with N/P.
- V) View the word in context.

A)- The documentation says that the user dictionary can be as large as disk space allows. The DSDD version has 341 free sectors. That would hold a truly massive user dictionary of several thousand words.

C)- Corrected words are later written back into your original document file.

L)- One, or several, or no words are displayed which SPELL-IT! believes are similar to the unrecognized word. The

program logic that does this is not as good as that of the "Franklin Spelling Ace", which does a fantastic job of phonetically guessing the word you are trying to spell. The SPELL-IT! logic is better than that of the WriterEase dictionary, which just presents you with that part of its dictionary where the unrecognized word would fit alphabetically. This fails miserably if the first letter or two of the unrecognized word are incorrect.

V)- Several lines of the original text file are displayed, one of which contains the first instance of the unrecognized word. If you have a Geneve or 80 column card you can configure SPELL-IT! to display in 80 columns. Most of the time this 80 column display is not as nice as the 40 column display because the SPELL-IT!'s short prompts seem so small in the middle of an otherwise empty screen. However, when viewing a word in context, an 80 column display is an asset. Viewing an 80 column document in 40 columns splits words in the middle and looks funny.

After you have dealt with the last unrecognized word, SPELL-IT! v1.05 writes the corrected text file back into your disk document file under a different file name. Make sure there is room on the disk. V1.01 overwrites the original text file with corrections. If the original word has its first letter capitalized, SPELL-IT! will capitalize the first letter of the corrected word. If the original is all in upper case, SPELL-IT! makes the corrected word all in upper case. If there are no upper case letters in the original word, there will be none in the corrected word. Unlike the way Dragon Slayer writes corrections, lines of your document are not usually split. Document lines are split only if the corrected word is so much longer than the original that it won't fit in the line in place of the original unrecognized word. Thus, minimal or no reformat is needed in the corrected document.

Dictionary word lists are simply DV80 files with one word on each line, arranged alphabetically except for the USER list. These are easy to load into Funnelweb and add to or subtract from. You can even substitute lists of foreign language words if you want.

SPELL-IT! is comparable, maybe even as good as, some modern spell checkers on IBM clone machines. The combination of 80 column Funnelweb and SPELL-IT! gives our machines word processing capabilities similar to expensive machines. So why buy one of the expensive machines? `***DONE**`

The Mystery of 32767

By: Andy Fruen, Lima UG

Almost every programmer has used the RESequence command once. And almost invariably, a "BAD LINE NUMBER" error is generated. List the line that holds the error, and you'll most likely find that for some reason, the program branches

out to line 32767. The maximum line number for the TI is 32766. Why, then, does the computer make us go to line 32767? Well, that's where I found a rather interesting "coincidence."

In a fairly recent MICROpendium article, the author discusses a program he wrote to resequence line numbers without error, and with greater power. Mainly, he wanted to correct the problem I mention. Anyway, for those unfamiliar with RES, here is a description of when this bug (or programmers nightmare) occurs. Suppose you have a line 10, in this line, it says GOTO 5, but there is no line 5. Run the program normally, and you'll get a BAD LINE NUMBER IN xx where xx is the line number that holds the error (in my example, it would be line 10). Now, RES the program (it is not the scope of this article to review all of the possibilities that RES gives. Look it up in the manuals or the quick reference cards). You'll see that the line 5 we wanted to go to became 32767. AARRGGHH!!

Now, the question was asked, "Why does TI send us here? Why line 32767 in particular?" Really, I didn't think too much about it, until I was reading a beginners guide to Assembly language. I found another instance using this number. People who program Assembly routines into Extended BASIC programs may already know. But for the rest of you (or those who forgot), here is my coincidence (Yes, I'm finally getting to the point of this article!) Did you ever type in or list a program with CALL LOADs? Ever wonder why some of the numbers were positive, as in CALL LOAD(2314,5), and others were negative, as in CALL LOAD(-31931,0)? Well, to represent number that are too large, "two's complement notation" is used. Basically, 65536 is subtracted from the large number. You see, if the address (first number) in a CALL LOAD is greater than our own 32767, this notation is used. It may be just a stupid coincidence, but it is interesting. If anyone can tell me another instance where 32767 forces an "odd" outcome, please drop me a line!

AUTHOR'S NOTE: As soon as I finished writing this article, I discovered in the User's Reference Guide (of all places!) that there IS INDEED another "odd" occurrence of the number 32767. It seems that, at least in TI BASIC, you can't have a dimension for an array greater than 32767. This ALSO occurs whenever the number of records opened in a file in SEQUENTIAL mode is greater than 32767, or the record length of FIXED mode is greater than 32767. The numeric expression required by the POS (POSITION) statement also cannot be greater than 32767. Next, I discovered that if either expression 1 or 2 of the SEG\$ function (string SEGment) if greater than 32767, you'll get an error, and the last one I found is that the value of a TAB can't be greater than, you guessed it, 32767. O.K. Now I think I've found most of the actual occurrences, but can anyone tell me WHY? The answers I get I'll try to get printed. And I thought that the mystery of 32767 was more or less limited to line numbers!

***DONE**

'Drew's Views: Picasso Enlarger
By: Andy Fruuh

Documentation.....B
Ease of Use.....A
Value.....A-
Final Grade.....A

AUTHOR: Paul Scheidemantle
Publisher: Asgard Software
P. O. Box 10306
Rockville, MD 20850

There is a fairly new utility out now for Picasso. It is called Picasso Enlarger, but don't let the title fool you. It does FAR more than enlarging. You can enlarge, shrink, and "ghost" images. The manual that comes with this piece of software has a cover featuring the horizontal and vertical enlarging and ghosting (see below). The manual I have (I got my copy from Paul Scheidemantle, the author) says it's from Asgard Software, but I hope it's pre-production and inspection. The manual has quite a few typos. They don't really take away from the purpose of the manual: to give instruction. However, it is the only bad mark for the whole program!

It is very easy to use. The whole thing loads out of Extended BASIC via a LOAD file. It self-starts, as you expect it to. It is a little slow, but you have to expect that with almost EVERY TI graphics utility. The effects produced by Picasso Enlarger are far worth the wait. I'd like to know how Paul Scheidemantle DOES it!

As far as value goes, it really depends on whether or not you use Picasso. If you use another "artist" program, this isn't worth the price, and I don't expect that you buy it. However, if you rather use Picasso (it's a whole lot easier to learn than other "artists") than this is an invaluable tool, WELL worth the cost. So, what can this actually do? Well, you can enlarge a picture either horizontally, vertically, or in both directions. You can also reduce a picture in the same ways. You can ghost a picture, which means that the image will appear to be lighter. What actually happens is that Picasso Enlarger will strip out some of the dots from the picture. You can also merge a TI-Artist instance-type picture into a Picasso picture. Very handy! Also, you can view this instance. As the manual states, "Because of the limitations of xbasic if it is an unusually large picture only a portion will be shown." You can catalog a disk (self-explanatory, I hope!). Finally, you can convert an eight pixel-high Artist font into one to use with Picasso, or vice versa.

My only conclusion is that this is a great addition to the toolbox of Picasso users. It is worth it's price. As I stated earlier, I only have a problem with the manual, and maybe the speed it takes from loading to running. Pre-scan

commands should, in my opinion, always be used, every permitting. So all in all, it's worth four stars. A fine effort by Paul, and very wise of Asgard to publish it.

Finally, does anyone know if Picasso resets the printer upon loading or anything? I set my printer to small line spacing, yet when I try to print a Picasso picture through Picasso, it prints with the ol' familiar horizontal lines. HELP!

##BOMEX#

LETTER TO THE EDITOR

Dear Charles,

Yes, I am enthusiastic about Harry Wilhelm's The Missing Link (a.k.a. TML). I'm not sure exactly what I said on the phone, but I think it was something like this: "Of all the Extended BASIC extensions I've reviewed in Computer Shopper and elsewhere - and I think I've reviewed all of the most important ones - I think The Missing Link offers the most striking possibilities." I believe the TML demo program itself is proof of that.

If I said that TML was "the best" of the lot without qualification, I may have said more than I intended, because I tend to be rather cautious when it comes to declaring on product "THE best." Which enhanced Extended BASIC is best depends upon your purpose. For example, Myarc Extended BASIC II offers a speed increase not found in other enhancements. For another example, if you want to do direct sector disk access, you may need something like Michael Riccio's STAR or "my" IXB. For yet another example, if you want to do database-type activities, you may prefer Jim Hollender's SXB or Richard Mitchell's String Master. I could go on to mention the strengths of other packages as well (such as Curtis Provance's EDP), but I'll close with just one more example: if you want to use an enhanced Extended BASIC to simplify writing standard Extended BASIC programs, I like Triton's SEB (which is probably the one I use more than any other).

But, again, to me The Missing Link opens up exciting possibilities for the Extended BASIC programmer who wants to do some neat things with bit-mapped mode in graphics. With TML, you can put a TI-Artist picture on the screen, and add windows, music, sprites with automotion, etc., doing it all at the same time. Harry Wilhelm's TML is an outstanding accomplishment, and I'm proud to have been involved in at least a small way with the beta-testing before Harry decided what software company to market TML with.

Incidentally, I do have perhaps a minor complaint about the way Texaments is doing the marketing: in a full-page ad in MICROpendium (March 1990, page 5), Steve Lamberti claims

NEXT PAGE

(in large type in the center of the page). "Through Extended BASIC, The Missing Link allows anyone to access all of the incredible graphics and text capabilities found in the TI-99/4a. This was something people said could never be done... we did it."

Well, Steve didn't do it: Harry Wilhelm did it, before Steve Lamberti ever saw the program, and it's disappointing to see a full-page ad for TML in which the President of the software company seems to take the credit and doesn't even mention the author by name! But I hope that won't stop people from buying the program. (All they have to do is send \$24.95 plus \$3.00 shipping to Texaments, 53 Center Street, Patchogue NY 11772.)

A quick comment or two about XXB. XXB has its own distinctive strengths. (1) XXB itself is free. (It's okay to pass around all the material on that 360 sector XXB/1-5 disk!) (2) XXB is not just an XB extension, but a growing library of "modules" of routines (written not only by me, but also by J. Peter hoddie, Curtis Provance, Andy Decker, and others) that you can, if you wish, embed in your XB programs. Source code for almost all of the routines is also available in the genial TRAVELER (which, however, is NOT free! *<grin>*). In short, XXB is perhaps best for those who want to try their own hand at putting together whatever routines they like for themselves, whereas The Missing Link is an easy-to-use integrated package for the XB programmer of exciting routines that at this time you can find nowhere else.

By the way, I intend to include material in GT for the benefit of those who own TML. I've already written several things, including a program that allows you to use Wayne Stith's KNICKFONT with TML, and another program that simplifies putting TI-Artist instances on the screen with TML, and I hope to do more as well.

Barry A. Traver
835 Green Valley Drive
Philadelphia PA 19128
(phone 215/483/1379)

LETTER TO THE EDITOR, WITH SOME NEWS

Dear Dr. Good:

We all enjoyed our visit to the Lima Faire, although it was a tiring experience. We're now enjoying the summer hiatus between Faires, and trying to get some new programs put together. Dolores is working on some music by Vivaldi, and I'm working on a new program for golfers, to keep track of and analyze their scores.

We hope you'll continue to enjoy your TI, and we'll keep making new programs for it.

Bruce Harrison Harrison Software
5705 40th Place, Hyattsville MD 20781

Review: Commodore's The Living Tomb, by Quinton Torrance reviewed by Andy Frueh, Lisa UG

At the Lima Fair, I had the opportunity to play (and of course, buy) the Living Tomb. I read about it first in MICROpendium but it didn't go into the type of extreme detail I needed to buy the game. After seeing it, I "had" to get it. Of course, I am quite an avid game-player, both fantasy and arcade, so a game like this appealed strongly to me.

Enough with the intro to the article, let's get into The Living Tomb ("Tomb"). Tomb is a one-player graphic adventure game in the Tunnels of Doom mold. It goes such beyond this with advanced graphics, fast action, and 100% joystick control. You never need to touch the keyboard. Every option is selected from a set of windowed menus. You can do the "normal" actions such as collecting items or examining them, battle moves, and even advanced operation such as sound and warning message delays.

The object is simple. Get a gem. Stopping you are countless monsters. Very few are friendly, and killing a friendly beast costs you Hit Points. If these points fall to 0, you die. Unfortunately, one of these monsters must be killed to win the game.

The Alchemy Gem will break the curse put over your land. It isn't easy to find in the 3 floors of the tomb. Moving from level to level requires you find the coil of rope. Very thorough play. There is a high-score rank board that you can put your name in. This is also done with the joystick. If you solve "Tomb", you get the title "Sir". It isn't extremely difficult, and I solved it after the 6th time of playing. Even though I solved it, I want to keep playing it. Addiction to an adventure after it is solved is rare. It isn't a frustrating game with tons of secret puzzles. Instead, it is straight forward. What makes it challenging is the monsters, and figuring out where the Gem is.

Another excellent feature is the windowing displays. The entire screen except the bottom row is used for the forward view, so windows are used when you examine or take inventory. You can fine-tune each game as to how fast it moves. The complete joystick control is a great idea. I love to be able to get away from the console and play games like this in comfort!

Unfortunately, I can't give Tomb a straight A+. There are a few complaints I have with it. The biggest one is the fact that I can't save a game. If I collected tons of weapons and armor but had to leave home for a few hours, I would have to either leave the TI on, or just shut it down. Bad show! Another complaint is although the graphics of the tomb, and your character after he dies (or you quit, called "suicide") are excellent, I can't help but feel cheated on the monster graphics, and how easy most of them are to kill.

At only \$15 the program is a good deal, and is a must if you like Tunnels of Doom type games. \$\$\$DONE!!!

TEXAS INSTRUMENTS



January 10, 1990

Mr. Andy Frueh
Lima User Group
638 Maplewood Drive
Lima, OH 45805

Cordially,

Lois Brock
Lois Brock
Consumer Services

Dear Mr. Frueh:

Thank you for your recent correspondence concerning TI-99/4A software.

I regret that we do not have any information on the "lost titles" that were never released. Some of the software in question may have been released and therefore may be available through third-party retailers.

WHEN IS A COPYRIGHT NOT A COPYRIGHT?
some questions posed by Charles Good
Lima Ohio User Group

Lots of the "never released software" I have described in a recent series of articles bears the "copyright 198x Texas Instruments" statement on the title screen. Attached is part of a letter T.I. wrote Andy Frueh in response to a request from Andy for information about the "never released software". If T.I. claims no information about the software, denies its existence, then does T.I. really own the copyright? Does this sort of "no information" statement in effect put the software in the public domain?

***DONE**

about finishing the program. I can't say for certain now that it will never or that it is not going to be released, but we always plan for the worst and hope for the best. If I don't hear anything more from him within a few months one way or the other I am just going to assume that the program is no longer available.....I found over the last two years in talking about PRESS that a lot of people were interested in a new word processor but most of the people were interested in PRESS because it had a new spelling checker....they weren't so much interested in Press, they wanted the spelling checker."

With the release of SPELL-IT!, PRESS has lost its reason for being. I was interested in PRESS 2 years ago because I wanted a GOOD 80 column word processor, with a good spell checker for my recently purchased 80 column AVPC card. Then along came 80 column Funnelweb, a superb word processing environment. Then along came SPELL-IT! If PRESS is ever released, nobody will buy it because its main features already exist in Funnelweb and SPELL-IT! The only unique feature left to PRESS is the ability to display on screen italic, enlarged print, and underlines. These are displayed in bit map mode, which is slow. At the 1989 Chicago faire, Chris Bobbitt suggested in his PRESS demo that in bit map mode, the screen display would not be able to keep up with a good typist. It is just TOO LATE FOR PRESS. All of its significant features can be found in existing software.

***DONE**

ITS TOO LATE FOR PRESS!
commentary by Charles Good about a quote from
Asgard's Chris Bobbitt.

The following statement was made concerning PRESS by Chris Bobbitt at the recent Lima NU6 Conference. The quote is taken from conference video tape #2.

"I was in Ottawa recently for the Ottawa TI show and I stayed with the author of PRESS, Charles Earl. He was showing me what he was doing with PRESS and how far it had gone. When I talked to him he didn't seem very positive