

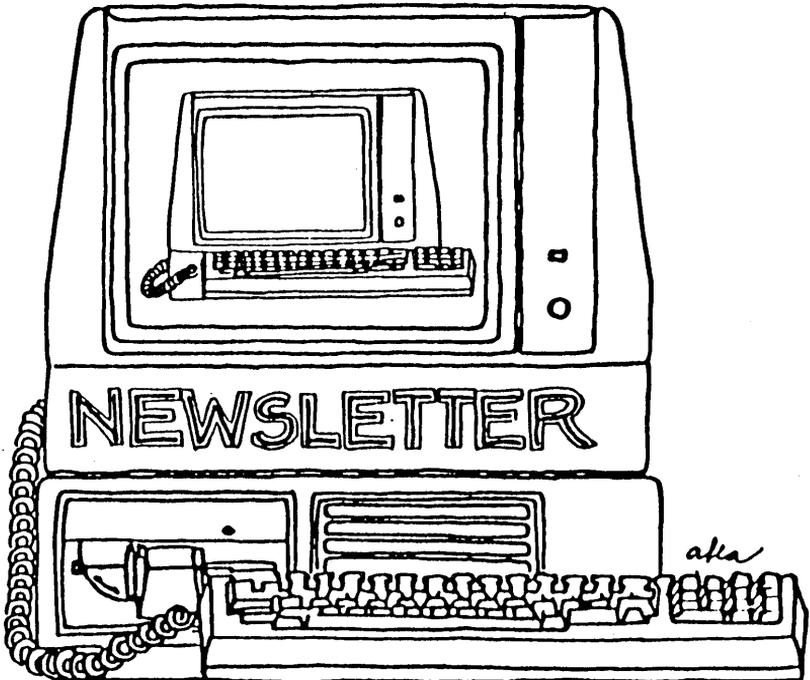
JULY 11, 1984

VOLUME 2

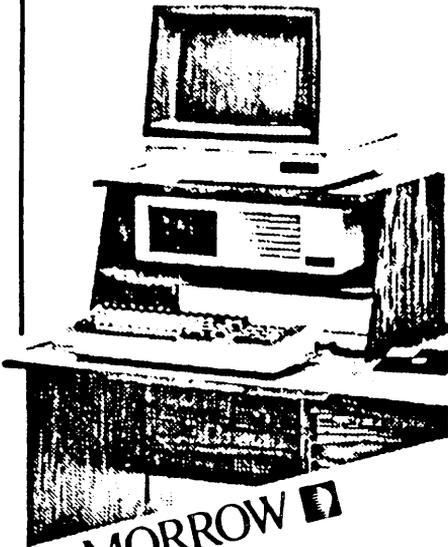
ISSUE # 7

BAY AREA MICRO DECISION USERS ASSOCIATION

BAM DUA



**A MUTUAL SUPPORT NETWORK FOR USERS OF
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Intermediate CP/M class,

Novice Emergency Clinic,

A class especially to get over beginners frustrations.

Personal Pearl Class,

This is the third PP class taught by Rick Rowe of Morrow. Half the participants need an MD3 and two empty floppies.

Public Domain Software.

ReachOut Modem program.

QUEST ACCOUNTANT program.

Advanced CP/M and Systems class.

Tour of Morrow, third one, by Ed Niehaus. Sometime in September. Meet at MORROW, 600 McCormick, San Leandro. No charge and well worth it.

NEWSLETTER

If you wish to submit material to the newsletter, please follow these guidelines:

- o Submit material before the last Saturday of the month
- o Submit hard copy along with a WordStar file on a SSDD diskette; left margin, default; right margin, 68 and right justified.
- o Include your name, address and telephone number
- o Send newsletter materials to: Newsletter Editor
BAMDUA, P.O. Box 5152
Berkeley, CA 94705

Your disk (and "gift" for articles published) will be returned to you. If you have questions, write to the BAMDUA box; otherwise, wait until September to call me (415)843-8167!

NEWSLETTER UPDATE

At our last board meeting (June 12) we decided to suspend publication of the Newsletter and the main meeting for the month of August. We hope this works out well for all the members as well as giving all our hard working volunteers a much needed break.
--Georgia Babladelis

FROM THE PRESIDENT'S DISK

by Sypko Andreae

Summer is here and things are slowing down. Or is there a trend towards calmer times in the micro computer world as a whole? If you talk to dealers and manufacturers they will tell you how slow summers always are. If you look at the attendance at BAMDUA meetings and classes then it is clear that most people are either on vacation or doing something else for a change. We have no less than six classes waiting for participants: MODEM7, Novice Emergency Clinic, CP/M Intermediate, Public Domain Software, QUEST and REACHOUT. See the preceding pages for information about joining classes.

Summer is a good time to relax. That is why the BAMDUA board has decided to hold no meetings in August. There will also be no newsletter in August. The handfull of volunteers who have been doing all the work to make BAMDUA a viable organization, are in great need of a break, to do something else for a change. In September we'll start afresh with the September newsletter, meetings, classes self-help seminars and all that good stuff.

More from the BAMDUA Board.

The BAMDUA Board holds monthly meetings. Lately we have been looking at our finances. The membership of BAMDUA, now a little over 750, is not growing much these days. Summer doldrumms no doubt. The positive cash flow, caused by the many new members joining us so far, has stopped and now we are "coasting". At the same time there some expenses that have grown and some other income (newsletter ads) that has diminished. To maintain the same level of service The BAMDUA Board voted for an increase in the yearly subscription and membership fee from \$12 to \$16, starting August 1, 1984.

At the same time some cost saving measures have been under consideration and will take effect soon. Skipping the August newsletter will not only give the BAMDUA workers some rest, but will also save us a bundle. Sorry, printers. Summer is here.

Special mention should be made of the superb work of our new treasurer David Rosner. He really cleaned up our financial administration a lot, providing the Board with pages of Supercalced financial statement. Now we actually now what we have and where we are headed financially ... just in time to make some changes.

New volunteers needed for several functions.

We have one if not two people who volunteered to take care of the BAMDUA Software library. They are looking forward to assembling some real neat volumes for you over the summer, ready for the september meeting, if not earlier. You can always call in to see what is new and get your volumes by mail or pick 'em up.

BAMDUA still needs someone willing to be SECRETARY. Here is a job description: Responsible for producing minutes of business sections of main meetings and Board meetings. Does not have to attend all membership meetings, but sees to it that someone produces a meeting report for the newsletter. Occasionally there are letters to write, but most routine work is done by the BAMDUA office.

BAMDUA also needs a new DIRECTOR OF ADVERTISING. An important function to help pay for the newsletter, which cannot be supported from the membership fees. This function involves calling our list of potential advertisers and assisting them to get their ads submitted (with check). Advertising has been an important share of the income of BAMDUA in the past. It needs constant care or advertisers fade away -- and not only during the summer doldrums.

Your EDITOR is looking for an ASSISTANT EDITOR to share in the considerable workload of putting together and producing the newsletter. If you want to learn how to run a newspaper, then start with BAMDUA. All we ask for is that you are curious, dependable and can commit yourself to the needed work. Talk to Georgia if you are interested in helping out.

The BAMDUA board of about 9 people meets once a month. If you are interested in either one of these Board positions, please write BAMDUA, attention your president.

Deals and Steals.

The current deals are MULTIFORM (\$43, deadline extended to August 31, 1984) and GRAFIKS 2.4 (around \$90, see ad in Morrow Owners Review, June 1984, page 7).

MULTIFORM: A file transfer program that -- not unlike UNIFORM -- is capable of transferring files from and to Morrow Micro Decisions to and from a host of other CP/M machines. MULTIFORM cannot quite do MS-DOS yet and we decided to wait until that version is ready. Unfortunately Paul Bartholomew, the author, had to go in the hospital for a while. He is back now and feels much better, except that now there is some delay in the MS-DOS equipped version of MULTIFORM. Send in your \$43 so we barter for the best deal possible.

GRAFIKS 2.4: Jim Galvin has an evaluation copy and reports that it works very well with his dot matrix printer. He has been doing the negotiating for BAMDUA with Robonics, (213) 316-7740. Send in your \$45 deposit to get on the list. You pay the remainder later. Deadline for this one is September 15, 1984.

We are introducing a new rule in the game. When the expected price is over \$45 you only have to deposit \$45 to get on the list for a software deal. When the software finally materializes you pay the remainder and get your package. This way you are not out of your money for very long without getting something to show for it.

37.50!!!!

(notes from the May meeting)

by Peter Campbell

Ever wonder why the Quest Bookkeeping program requires a registration fee of \$37.50 before you can run it? Ever wonder if you should pay the \$37.50? Ever wonder why Morrow includes the program with the MD 3 and the MD 11? Ever wonder what to do with the program? Ever wonder if anyone could answer all your questions?

John Leonardo and Kurt Christoferson from Quest, Inc., tried to answer as many as possible Tuesday evening, May 29 at the monthly BAMDUA meeting. Held at the University of San Francisco, the meeting was well attended. There was an aura of wonder and confusion in the air. About 20% of the persons in attendance said they had registered Quest, but it was not clear that they all knew or understood what it was for, or what they had bought.

Quest has been in business since 1976. They have specialized in accounting systems, but only recently developed the Quest program for Micro's. Most users are small companies, with sales of \$250,000 or less. The system is ideally suited to the needs of these businesses. It can be used as an integrated system, or the individual parts may be used independently. Quest is bringing out more complex programs in the near future. Bookkeeper II, a more advanced version of the Bookkeeper, is now being shipped with the MD 11. Soon to be introduced is the Accountant program, and later the Comptroller program. These will be full accounting packages designed for use on Micro's, and there will be a high degree of upward compatibility in most programs. An outstanding feature of the Quest programs is that they are menu driven, and very easy to use. We were told that most available accounting packages are difficult to use unless you are an accountant, and most small business owners are not.

Morrow is the only company that bundles accounting software with its computers. Many may ask "Why bother?". The reason is that Bob Dilworth, President of Morrow, is of an accounting background, and he believed that it would be a valuable feature for many Morrow owners. He was apparently right, because Quest claims approximately 20% of the programs being shipped are being registered. It is not a program all owners will want to use, and this is the reason for the registration fee. The contract between Morrow and Quest provides that the program is basically free unless you want to use it, and then you must pay the small registration fee. This is Quest's only compensation for the bundled system. Quite a bargain when you consider the program retails for \$300! When registered, the owners are given a code number to unlock the system. Parts of the program will not work unless you have the code number.

Admittedly, Quest is not a program everyone will need to use. For those who do, Quest will soon be offering a Hot-Line support system. There will be an 800 telephone number to call for help. It will not be free, after all, how much service can you expect to get for \$37.50. The Hot-Line will be by subscription at the rate of \$25.00 for 30 minutes of phone time, and it will be billed in 3 minute increments. For those of us who need extra help, this will be a valuable service. The Hot-Line will be available soon, maybe even in June. There will be a notice either in this publication, or in the Morrow Owners Review, or even in both. Watch for it.

If you have been wondering if Quest is for you, dig out the manual and disks. Dust them off and try it out. It costs nothing to try out the built in tutorial, and even to try entering some real data. Then if it looks like it will fill your needs, send in your registration. After all, you could spend a lot more than \$37.50, and end up with a program that is not nearly as good or versatile. Compare Quest with other available packages, and you may be pleasantly surprised.



JUNE POTPOURRI

(notes from the June meeting)
by Peter Campbell

First, let me set the record straight. In May I stated categorically that the NewWord manual was written by Morrow. This is apparently not quite true. Stan Reynolds, the president of NewStar Software states that NewStar actually wrote the NewWord manual. More precisely, it was sort of a joint effort. NewWord provided all the contents, Morrow made it "pretty". Regardless of who actually put it together, let's face it--it's a pretty good book. It's not the "just can't put it down 'till I reach the end" kind of book, but it sure does do a good, very readable, job of explaining how to use NewWord.

Stan was one of the featured speakers at the June meeting. As I became overwhelmed by *deja vu*, Stan gave a short presentation and then subjected himself to that uncanny characteristic of Morrow users, the ability to ask critical questions. (Won't our speakers ever learn? Don't they realize that we like to ask DIFFICULT questions?) But Stan handled them all like the pro he is. To the many questions posed about the differences between NewWord and WordStar, he replied over and over again, "Hey, we sell NewWord. We're not in the WordStar business." Logical! Naturally, there are many differences. Those of us who have had the opportunity to use both know that the two programs look similar in many respects. But they are in fact very different from each other, sort of like apples and oranges. Read the manual to fully understand all the features.

When MicroPro (ever notice how HighTech names always have a Capital letter in the middle?) let half of its employees go in 1982, Stan and some of the others decided to develop a new program which would address some of the problems they perceived in WordStar. Of course, NewWord is the first result. George Morrow recognized that the program offered at least equivalent utility at a better price than the other product, and so entered into a contract with NewStar to bundle the program with his computers.

Some future offerings of NewStar to watch for. They are about to introduce a version in Kanji, the written Japanese language. This is no easy task. Future products will probably also include spread sheet and data base programs. Currently available is NewWord version 1.31, which may be had for \$25 (plus your old distribution diskette, of course). Wait a couple of weeks and you can get the next version, or the next, or.... Version 1.31 includes display of BOLD and underline on screen. Also included is a conditional merge print feature. Soon to be released is a version that will include a usable column move feature. (Don't expect true micro justification with column move. It is just not likely to ever happen.) To get your upgrade, send \$25 plus your old NewWord distribution diskette to: NewStar Software Inc., 1601 Oak Park Blvd., Pleasant Hill, CA 94523. Incidentally, this upgrade program is for those of us who currently have NewWord. It is not the same upgrade program that permits you to upgrade from WordStar. That one costs a hundred bucks, and it is a bargain too.

NewWord wants our business. They want to work with the users groups to provide the support we want and need. Arrangements will be made to provide communication channels with NewStar, and also to provide other benefits which neither Morrow nor our Dealers are able to offer to us. Follow developments in future newsletters.

Where has all the space gone? There is so much material presented at the meetings, and so little room to report it all. It just can't be done. Two other speakers, both from Morrow, gave excellent presentations. Vicky Andreason, Western Marketing Director, spoke about the questionnaire which Morrow sent to us a while back. I don't know about you, but I always wonder how those things turn out. Well, they found out, and were surprised by some

of the results. There were of course many variations from the norm, but the typical profile of the Morrow owner was as follows: Male, 40 years old, PhD, and purchased his computer with his own money. (As opposed to it being bought by his company.) The Company advertising will be influenced by the results of the survey. Incidentally, watch for increased advertising in the months ahead in Byte, Info World and elsewhere.

Howard Fullmer, Director of Engineering, wrapped up the meeting with a discussion of some of the technological developments that are appearing in the industry. There is a lot of developmental work going on in the arena of disk drives. The goal is to increase the storage capacity. There are 5 1/4" floppy drives that are designed to store up to 3.3 megabytes. New technologies are being tried on hard disk systems. One company has developed a type of "hard" disk in which there is a rigid head, as opposed to a flying head as in the MD 11, with a flying disk medium. These high capacity systems are being evaluated by Morrow, but so far they are not sure of the reliability of the products. The company is understandably conservative when it comes to new products. Enough can go wrong with the established technology. They don't need to go out looking for trouble.

Howard finished up with a review of hard disk backup systems. The MD 11 uses a floppy backup system. Other systems being considered in the industry are removable hard disk systems and tape cartridge systems. The tape systems were once thought to be too expensive and impractical to be effective. Recent developments may change this belief. Systems are being developed that are reliable, and relatively inexpensive. Howard predicts that a tape system will be available within about 12 months at a cost of about \$500-\$600. This is a far cry from the \$4-5000 cost of a few years ago.

FROM THE MAILBOX

(Milton Levison asked that we print his letter to Bob Dilworth in apology for hollering at him at the tri-partite meeting in Berkeley in April. The following is an edited version of it - ed.).

Dear President Dilworth:

I apologize. I was wrong ... When I bought my second Morrow ... last week, I reviewed the new Personal Pearl Manual. It's remarkably good... You've done a fine job on the new one...

Sincerely- Milton E. Levison

(ed.'s p.s.: I understand that Mr. Levison has recanted his apology!)

There's a boo-boo on page 16 of the June newsletter and I'm afraid it's my fault. The May member's meeting was my first, and on the notepad someone asked if anyone knew anything about Uniform. I had just bought Uniform at Access to Software on Geary Blvd. at a 15% discount, which the salesman said is their policy for all CP/M software, all the time. Anyway, there wasn't enough room to fit that information in below the question, so I carefully (I thought) wrote it over the question. Apparently somebody then answered the question above the one on Uniform, which it seems was about Turbo Pascal, and it looked like my answer was a continuation of that one. I haven't checked but I kind of doubt Access to Software would carry Turbo Pascal - they are oriented more to home and small business uses.

Anyway, should you get any irate callers, you can blame it on me. I'll be more careful in the future.

I think BAMDUA is marvelous. It has already, in one month, increased my enjoyment in having a computer.

---Phyllis Yates

PASS THE NOTEPAD

Word Processing

Q: One character often drops out after word wrap on Wordstar 3.0. Any idea why? What is "rollover"? (Norm Hawker, 751-8765)

A: For IRA's, it means you can move the money in your old company's retirement fund into a new retirement fund without paying a tax. For N-key terminals, it means no matter how fast you type, the keyboard will pass your characters in the sequence that you hit the keys. (CB2)

A: And for Chuck Berry, it is something Beethoven is driven to do. (unsigned)

Q: Knowing Wordstar does not microjustify spaces between letters and that the capability is possible with the printer (MP200), is there any way around the software to enable the "hard copy" to be microjustified? (Bonnie Draheim, 752-2384)

A: You must distinguish between micro spacing and proportional spacing. Wordstar will do both. Your printer will too, but if you try do these with both at once you'll probably have problems. (unsigned)

A: I recommend reading M.David Stone's Getting The Most From WordStar and MailMerge for a lucid discussion of the distinction between proportional spacing, microjustification, et al. (ed.)

Q: Is anyone familiar with any printer control programs for the MD-3 similar to Fancy Font? Cost? (Dick Hoffman, 707-762-8286)

Q: Has anyone had success using Fancy Font on an MD-11? (Carl Naegele, 472-2984)

Q: Anyone typing Spanish text with New Word and Okidata 92? How do you print an upside down ? or ! (Bart Anderson, 321-9764)

Q: I have tried to "Customize" Wordstar according to BAMDUA December page 5. Problem: I don't get the responses that are listed in page 6 (same article). Jim Halverson, 339-8468

Q: I am looking for a simple full screen text editor similar to PIE which I use on a Heathkit at work. Any recommendations? Jerry Gibson, (714)493-1815. (Call collect).

Logicalc

Q: Why can't Logicalc add (+SUM) vertically? It works fine horizontally. (Bud, 271-7778 days)

A: Logicalc does sum vertically! For example, if you wish to sum values in column A for 10 rows, simply draw your line at row 11 and in row 12 enter the formula: +sum(A3>A10), assuming your first entry of data is in row 3. If you get a peculiar result, make sure your column is wide enough to accept the result! (--ed.)

Q: Having a problem with Logicalc. I have logged in all my information, but when I try to get it to calculate and it does not work. At the point you are called to "+SUM" in a column it does not add up the column. (Jim Halverson, 339-8468)

A: I think you are the person I talked to on the phone. I hope your problem is solved now. If not, see above answer. (-ed.)

A: Yeah, that's what the book sez, but it doesn't work for me either. (Bud, 271-7778 days)

A: +SUM (A1>G1) or whatever column you want to add. (unsigned)

A: No spaces, make sure you use "+", and close (). (unsigned)

Q: How do I load a new file in Logicalc without getting out of the program and reloading Logicalc again? (Carl, 581-4862)

A: Use the semicolon for the command, as shown in the manual, then enter "L" for load, and then name of file. Make sure to save (use semicolon for the command and then "S") old file before loading new file. (unsigned)

Personal Pearl/dBASE II

Q: I have a problem with my Personal Pearl invoice program. It will only accept about 15 darn entries and then it will "crash". (Joe Hiross, 647-7904)

Q: Has anyone found a simple method of converting Pearl data files to dBASE II data files. (Kathy, 878-4914)

A: Yes! (Tom Palmer, 881-3433 days, 934-6059 eves)

Q: How can I learn to master dBASE II lessons, etc? (Bob McAloney, 864-3708)

A: Marc Norton, 552-5549

Basic

Q: My problem is getting my computer to stop asking questions and allow me to enter M-Basic. What it does is ask BAZIC? Although I have followed instructions step by step all I get is the question BAZIC? (Rashida, 532-2381)

A: Try typing "MBASIC" <RETURN> (not "BAZIC") (unsigned)

A: Computer doesn't understand word. Make sure lever is in place and that you use correct word. MBASIC or BAZIC are Morrow's Basic program versions. (unsigned)

A: Try BAZIC08. (unsigned)

A: This probably means that you haven't inserted a disk with the program in question on it. Disable menu by pressing "Escape" key and type DIR at A> prompt to see what you have on disk. (unsigned)

Other Software

Q: Is there a good index system for file maintenance on a public domain disk?

A: See "LU3.COM" and "LU300.DOC" on BAMDUA library disk volume 11. (unsigned)

Q: How can I get a list of programs that run on an MD-2? (Carl, 581-4862 eves, 781-8105 morning)

A: Morrow has published a book of the software that runs on all Micro Decisions. It's available to be consulted at retailers that carry Morrow machines.

Drives

Q: I would like information on the hookup of two Teac FD-50A disk drives (Shugart compatible) to my MD-2 Rev. 1 board (with expansion port for 2 additional drives).
(Dan Won, 566-4528 or 641-2866)

Q: My MD-3 is STILL noisy as XXXX! The fix in Morrow Review didn't take. What now? (Richard Snavelly, 532-0125)

Q: My MD-3 has developed a couple of quirks. Lately it has not been finding drive B ready. I have to open the B drive door and close it again and hit "R" and then it finds the drive ready. Also lately, print commands sometimes fail to get sent to the printer and WS freezes and I have to reset. What's goin' on? (Don, 753-2486)

A: Are your floppies real old? Are your read/write heads clean? (If you decide to clean your heads, make sure you purchase a "non-abrasive" head cleaner.) (unsigned)

A: In the Morrow Owners mag this problem is noted as the "sleepy head syndrome" with the correct fix. (unsigned)

Q: The Morrow Owner's Review has an article on "How to Quiet Your MD-3," using SYSGEN, DDT, and Stat. I recorded these on a blank disk as described, but when the SYSGEN record came on the screen at the request "NEXT PC", the hexadecimal code was entirely different, and the BF's I was supposed to change were all missing. Are different drives using different SYSGEN codes on the MD-3? Pat Rapiet, 223-7567

A: I have an MD-3 and it worked for me. David 531-6541/556-7712 days

You may have an updated version which has this already done in it.

Modems

Q: Is this a software or hardware problem? My modem dials, connects and loses the carrier. (George Wright, 564-9353)

Q: Ditto. (Don, 753-2486)

A: Very possibly the switches on your modem are set wrong. (Marc Norton, 552-5549)

Q: I understand that a version of Modem 7 is available on one of the BAMDUA library disks which will work on the MD-11. I have not been able to find it. Any help?

A: Volume 9 covers modems. (unsigned)

Q: Can't get modem to work with MD-2. Would like to compare notes with successful modem operator. (Per Madsen, 928-4509)

Q: I purchased a Hayes Smartmodem for my MD-3 and made a cable to the Hayes specification. The system talked to the modem, but modem didn't talk back. So I made another cable according to the instructions in MOR. The Smartmodem played dumb again. What am I doing wrong? (Chuck Burwell, 826-3991)

Q: Has anyone tried to use MDM712 to access DJNS? I have an MD2 with Liberty 100 terminal and MDM712 doesn't work for DJNS. Jerry Gibson (714)493-1815. (Call collect).

CABLES

If you need to change pins on your cable-connectors go to Zack's or someother electronics store (Al Lasher's) and get a \$2.00 pin puller and do it yourself or simply take the connector to the T.V. repair shop and let them do it for \$5-10.

Hardware

Q: I have an MD-2. 1) What advantages are there in moving up to an MD-3? 2) How is it done? 3) Does it give more memory? (Bob McAloney, 864-3708)

A: 1-You can cram more programs onto a disk.
2-Buy the Morrow upgrade, \$650(?)
3-No, just more disk storage. Diskettes are double-sided, twice as much storage space on disks. (unsigned)

A: Do check data compatibility on disks. (unsigned)

Q: I have a Heath H-8 sitting in a corner that I would like to make a slave to my MD-3. Has anyone done link-ups of this sort before, with any other pair of microprocessors? Can anyone recommend articles, hints, etc? (Chuck Burwell, 826-3991)

Q: I'm planning on moving to London in August for 6 months and then to Hong Kong for 2 years. Does anyone know what I can expect as far as being able to operate my computer regarding electricity? Would it be best to sell it? If yes, anyone interested in an MD-3? (Bonnie Draheim, 752-2384)

PRINTERS

Q: Using a MD-100 printer with a 15-pitch daisy wheel, how do you put 120 characters on a line? Can Winstall commands be involved? John H. Johnson, 843-6622.

A: Try setting margins at 0 and 80 with Wordwrap on. At 15 pitch Wordstar will wrap at 120 characters. (80 column Std. width). Do this with compressed print. D.M. Rapier

PIP'S DEVICES

by Frank Oechsli

The PIP command is of the form: PIP <OUTPUT>=<INPUT>[OPTIONS] We are probably all familiar with the PIP commands where <OUTPUT> and <INPUT> can be disk files; we may be less familiar with using DEVICES for input and output. In any PIP command, we can use CP/M-defined logical DEVICES for either input or output; we just have to be careful not to use input devices for output and v.v. The legal devices (the colons are part of the name) are CON: (input and output to the console), LST: (output to the list device), RDR: (input from the "reader") and PUN: (output to the "punch"). In this piece, we are primarily concerned with LST: and RDR:. We will ignore PUN:, but first we need to clarify the use of CON:.

With CON: as output, we can write to the CRT screen. This is not normally very interesting except with short files since things flash by pretty quickly. For input, CON: allows us to enter things from the keyboard. Everything entered is echoed to the screen so we will have a general idea what we have entered. We can use the normal CP/M line editing commands such as <CTL>H to backspace and erase, <CTL>J for line feed and the like. It is important that we can enter control and <ESC> (escape) codes even though the screen may not react to them; our printers will respond to many of them!

PIP Options for Printer Formatting

To try these suggestions out, put a disk with PIP and one or more simple text files in drive A. It would help to have a WordStar text file to illustrate a couple of points. The PIP options most useful to the LST: device are "Pn", "Tn", "N", "Z" and "Dn"; sometimes useful, but not discussed, are "F", "L" and "U". We are all familiar with TYPE <filename> which will print out a text file to the LST: device if we have done a <CTL>P first. The command PIP LST:=(filename) will do exactly the same thing except that we won't see the output come across our screen. If we specify an option on the PIP command line, we get a limited control over the formatting for the printer. Try the five options listed above on your text files. For example, type PIP LST:=(filename)[ND80T8P60Z] and see what happens. If your text is over 60 lines long you should get a) numbered lines of output (N), b) lines truncated at column 80 (D80), c) tabs expanded to 8 columns (T8), d) a skip to the top of page after 60 lines (P60), and e) the 8th bit of each byte zeroed (Z). The effect of these options will depend on the file and/or your printer. Let's discuss each option.

"N" gives you numbered lines of output. This can be useful for obvious reasons, but it also allows you to indent lines; useful if you have a MP100 printer with forms tractor that "loses" your first column on the left-hand margin of the paper. It also provides a

space for punching or binding even if you don't need numbers. "N" adds 8 columns on the left. If that's too many for your printer, you can delete everything after column n with the "Dn" command. "Pn" always skips to a new page after n lines.

"Tn" will have no effect if there are no tab characters in the file. Otherwise, its effect depends on your printer. My Epson printer comes on with tabs set every 8 columns. This is the CP/M default, so CP/M created files look fine. My MP100 printer reacts to tab characters, but has no tabs set. It spaces over to the end of the line and forlornly beeps at me when it sees a tab character. Other printers that don't recognize tab characters at all will just give garbled output. "Tn" helps with all of these since it actually removes the tab character and inserts spaces to simulate tabbing.

Among other things, "Z" is useful for printing WordStar files outside of WordStar. WordStar "sets" the 8th bit of the last character of every word. The effect depends on your printer. My MP100 doesn't recognize characters with the 8th bit "set" and merely drops them; my Epson prints the last character in every word in italics. "Z" fixes both of these problems.

The combination of P60, T8 and N options is so useful that PIP has a special arrangement to let you use the three automatically. PRN: is a synonym for LST: that will give you the options mentioned. That is, PRN:=<file> is the same as LST:=<file>[P60T8N].

Reading from and writing to your serial port with PIP

The following assumes that LST: refers to your serial port. You can make the assignment with SETUP if you have an MD-3. LST: refers to your logical list device, but CP/M could care less what you have physically attached to it. Suppose it is a modem (or another computer direct-wired) with wires for pins 2 & 3 crossed if need be. You can do output to LST: and can also do input to RDR:. So, if you issue the command PIP LST:=<filename> the file named "filename" will go out the serial (RS-232) port. What happens to it after it leaves depends on the receiving device but if the receiving device is another microcomputer under the control of PIP, and it had issued the command PIP <filename2>=RDR: file "filename" from microcomputer # 1 would be captured on disk by microcomputer #2 as the file "filename2", assuming that baudrates, etc. were properly matched.

That's enough of a hint to get you started moving files across the RS-232 port. This knowledge isn't just theoretical; we have used it to up- and down-load with a Tandy Model 100 brief-case computer connected to the Morrow by 4-wire RS-232 cable.

Next time, if there is interest, we'll talk about using PIP to "set up" your printer with printer codes, as well as concatenating files and DEVICES for input and output.

DECIPHERING YOUR TERMINAL MANUAL

(Part 2 of 2)

by John Vanderwood

A word of warning: This article won't really tell you how to do anything useful. It is intended mainly to tie together some scattered concepts that have a tendency to confuse and intimidate unsophisticated computer users like myself.

Last month we saw how escape sequences are used by programmers to exercise such advanced features of modern terminals as blinking and reverse video. This installment focuses on control codes, which are similar to escape sequences but perform more fundamental and mundane chores.

But first, a note about the MDT-50 manual...

Those of you who selected the Morrow MDT-50 terminal have purchased a well-respected piece of hardware. However, its "preliminary" manual is not quite up to par. And you may be wondering when the final version will be available.

Without going into details, relations between Liberty Electronics (the manufacturer of the MDT-50) and Morrow have seen better days. When the Liberty/Morrow OEM agreement was made, Liberty hurriedly produced the preliminary version just for Morrow, with the understanding that a final manual would come about in a reasonable time. Unfortunately, when a "reasonable time" had passed, so had the honeymoon days of Morrow and Liberty.

If there were ever to be a polished, illustrated MDT-50 manual, it would be up to Morrow to produce it. The MDT-50 is now a discontinued product. And the text of the preliminary version is correct, albeit dense and unappealing. So we decided the best allocation of documentation funds would not include an MDT-50 overhaul. We apologize and beg your understanding.

What Control Codes Are

In normal serial communication between a computer and its peripherals, seven bits are used to form unique patterns of 1's and 0's that define numbers, letters, punctuation marks, and control codes.

In terms of bit patterns, the only thing that distinguishes a control code from a letter is the fact that its two highest bits (7 and 6) are ALWAYS ZERO. Letters, numbers, and punctuation marks always have a one for either or both of these bits.

Take a look at the ASCII chart printed in Part 1 (see previous newsletter). It is divided into Displayable Characters and Control Characters (= control codes). Refer to last month's article for instructions on reading an ASCII chart if you need help.

Notice that the table doesn't list names like "CTRL-J". Instead it has strange names like NUL and SOH. Most of these are specifically for teletype machines and their meanings are lost in the mists of antiquity. Others are still in use with video terminals and printers. These are the ones that interest us here.

Example: LINE FEED A "line feed" occurs when your cursor moves down a line onscreen, or when your printer rolls the paper up a line. Find LF in the table. See that its bit pattern is 000 1010 or 0A hex. You'll also note the pattern for J is 100 1010 or 4A hex. The only difference between J and Line Feed is the setting of the first bit. Line feeds are commonly referred to as "CTRL-J's".

FUNDAMENTAL PRINCIPLE #1: To discover the "CTRL" letter for a control code (instead of the NUL or DLE-type designation), add 40 Hex to it - in effect, move four columns across the table. Line Feed = CTRL-J. Back Space (BS) = CTRL-H. And so on.

Here's a useful exercise that helps everything fall into place. It may make you nervous to try it, but you should do it anyway. You won't be risking danger to yourself or your terminal, I promise.

1. Turn your terminal and computer off. Disconnect the terminal's cable at the terminal end so the DTE or RS-232 connector is accessible. Insert a small unfolded paper clip (or thin stripped wire) into holes 2 and 3 as shown below. Don't force the paper clip if it's too large for the hole - use something thinner.

Insert unfolded paper clip into holes 2 and 3.

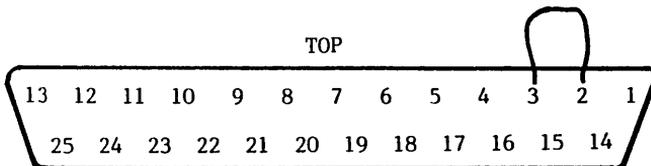


Figure 1: Jumpering DTE connector pins 2 and 3.

2. Turn the terminal back on - you don't need the computer for this. Enter these keystrokes and watch what happens:

CTRL-Z to home the cursor
CTRL-J for line feeds
CTRL-I to move into the screen by tab
CTRL-L to move right one space at a time
CTRL-H to back space or back tab
CTRL-M to go all the way left (carriage return)
CTRL-K to go up a line (vertical tab)
CTRL-G to ring the bell

Look in your manual for a table of these codes and what they make your terminal do:

MDT-20 page 3-9
MDT-50 page 24
MDT-60 page 3-11

Now you know how programs like NewWord paint your screen. When you install such a program for your terminal, it builds up a table of these codes and escape sequences. So when it's time to move to the left edge of a line (say, when you enter ^QS), it looks in the table and discovers that the correct code to send your terminal is CTRL-M.

You can restore your hardware to its normal setup now, by the way.

Parenthetically, NewWord knows that your Morrow terminal can use the "random cursor positioning" escape sequence covered last month. So to move the cursor from the top to the bottom of the screen, NewWord would send out one such escape sequence. With a more primitive terminal, it would accomplish the same thing by sending out 24 line feeds in a row.

Why Control Codes Confuse People

In virtually any terminal manual, you'll be told that CTRL-G causes the terminal's bell to ring. ("Bell" is a carryover from teletype machines that actually used a bell instead of a beeper.) But you say: I thought CTRL-G meant "erase a character"!

Similarly, CTRL-L moves the cursor one space right, according to the manual. "Now wait a minute," you object. "CTRL-D moves the cursor right..and CTRL-L means repeat find & replace. I'm confused." Perfectly understandable.

The problem here is that when you press a key, its code passes through several layers of software. The code that gets sent back to your terminal may (and probably will) be completely different from the one you type.

FUNDAMENTAL PRINCIPLE #2: Letters and control codes do NOT go straight from your keyboard to the screen. They go from the keyboard to the computer, where they are interpreted. The computer either "echos" them back to your screen (what usually happens when you type letters), or it acts on them, as in the case of a NewWord CTRL command. In the latter case, something gets sent back to your screen, but it's not the same as what you typed.

Now you can see the reason for the paper clip trick. It eliminates the software manipulation of control codes you type. The paper clip is taking outbound data from the connector's pin 2 and feeding it straight back into the inbound data pin, #3.

Summary

Control codes and escape sequences are a programmer's way of getting your screen to look the way it should, with the least possible time spent repainting it when something is added to or taken from the display.

Control codes, by virtue of their long and venerable history, are highly standardized among terminals. They are the absolute minimum of codes needed to move a cursor around on the screen. Escape sequences handle the more fancy stuff. There is almost no standardization of escape sequences among terminal brands.

The more flexible a terminal's selection of escape sequences is, the more advanced or "intelligent" it is considered to be. When a terminal possesses a high degree of intelligence (as do all Morrow terminals), it can handle more display chores on its own, freeing the CPU to go on to less trivial affairs. Thus everything simply runs faster.

To test the effects of control codes and escape sequences yourself, you need to bypass the computer. Otherwise CP/M and application programs will probably trap them and turn them into something else (or simply eat them up so your screen never knows you typed anything).

Advanced Fun

In this world of everything being the same, just different, it's not surprising that your printer will recognize most of these control codes too.

Sending control codes and escape sequences to your printer can be done by way of the `pip lst:=con:` command. Note that escape sequences for printers are quite different from those used by terminals; they control stuff like pitch, line spacing, and character set.

Try using the pip command above and entering CTRL-J (line feed), CTRL-M (carriage return), and CTRL-L (form feed). Those are the basics for printer manipulation. Check your printer manual for others. Be aware that Morrow printers won't print spaces until some other character is typed.

One last point: "Carriage Return" means simply "move the cursor (or print head) all the way left." It doesn't imply "move the cursor down (or feed the paper up), as a typewriter does when you hit RETURN. To simulate that movement on most printers you must send a carriage return and a line feed, or CTRL-J and CTRL-M.

UTILITIES IN REVIEW: MDM7XX

by Dee Pourciau

MDM7XX, now MDM740 and holding(?), is probably the most useful and valuable program available at no charge for personal use. It is authored primarily by Irv Hoff with some help from others and is copyrighted by Irv. He does not consider it to be a program in the public domain primarily, as I understand it, to control changes which for a while seemed to be getting a bit out of hand. At MDM730 Irv called a halt to changes and said that he was going on to bigger and better things. This lasted about a week. A new Racal-Vadic modem which has the ability to auto-link phone numbers then inspired him to add the facility to MDM730 and so now we have MDM740.

MDM740 is an extremely versatile program allowing communication between two computers. I use it primarily to communicate with remote bulletin board systems (RBBS's), and remote CP/M systems (RCPM's) but it lends itself well also to direct one on one communication and can also be used to communicate with the large data bases such as CompuServe and the Source.

Following is a short summary of the major features of the program.

1. It enables direct keyboard to keyboard communication between computers.
2. It enables downloading (receiving) files from a remote computer and uploading (transmission) of files to a remote computer.
3. Messages received from a remote computer may be either routed to the printer or to a disk file and both may be toggled on and off at will.

4. When used with Hayes or "Hayes compatible" modems the program provides for auto dialing of up to 36 numbers and two alternate long distance systems. Any number called may be redialed indefinitely.

5. Numbers to be called may be "auto-linked" with up to 32 numbers. Linked numbers will be called in series until one of the group answers.

6. A special function key facility is provided which enables sending a message with two key strokes which can be as long as free memory allows. Eleven messages may be programmed.

There are several associated programs such as MDMFNK.COM which is used to set up the messages to be sent with the function keys, M7NM.ASM and M7LIB.COM which are used to set up the phone number library and MDMLINK.COM which may be used to adapt the program to a particular computer.

MDM740.COM may be found in a basic form on many RCPM's along with overlays for many of the more popular computers. Detailed instructions for overlaying the main program with the one for your particular computer are found in each of the overlay files. This ASM file (M717MD.ASM for the Micro-Decision) may be edited to personal preference in several ways. For instance the default baud rate may be changed (300 or 1200 in the case of the Micro-Decision), various delay times may be changed as might be required for some systems, and touch or pulse dialing may be chosen. The desired changes are made to the ASM file using a word processing program and the file is then converted to a .HEX file using ASM.COM. The .HEX file is then inserted into the main program using DDT as described in the ASM file or by using MDMLINK.COM.

Irv Hoff has done an exceptionally good job of documenting MDM740 and its related programs. MDM740.DOC gives very detailed and well written instructions on the use of the program and a very good command summary. The program is simple to use simply, but can become more and more useful as one becomes familiar with all of the commands and functions available.

A large vote of thanks is due to Irv Hoff for his work in developing MDM740 into the very flexible and versatile program it is today.

Item: Wendell Wood is membership chairman for SMUG (Stanford User's Group) and he says paid membership as of this date is 64.

REMINDER: There will be no Newsletter nor Big Meeting in August.

UTILITIES IN REVIEW: DIRECTORIES

by Paul Illes and Georgia Babladelis

You may have noticed that there are several directory commands available on your various library disks. Library volumes 1, 4, 5, and 6 are particularly fruitful sources for ways to check your directory. Paul has his favorites and Georgia has hers. You can pick your own from among: XDDIR (Vol. 1), XDIR (Vols. 1, 2, 3), D (Vol.1), X (Vol.4), SD-44 (Vol.5), DIRCHK (Vol. 5), ALLOC (Vol. 5), and DIR22 (Vol. 6).

We ran the directory commands on the same files in drive B to give you a comparative idea of what each one produces for you. In each case, if you want to print out the directory, you must use ^P before hitting RETURN.

A> XDDIR B: <RETURN>

DRIVE:B		ENTRIES:4		SPACE USED:22K
FILES:4		LEFT:124		LEFT:164K
ALPHA	2K	GAMMA	4K	
BETA TXT	10K	DELTA	6K	

A> XDIR B: <RETURN>

ALPHA	2K
BETA.TXT	10K
GAMMA	4K
DELTA	6K

Disk B: 2K blocks, Size=190K, 4 Files, Used=26K, Space=164K

The D command does not give you a directory exactly. It allows you to list what has been added or deleted since your last D SET, which is the way to "register" all current file names into the D Com. When you make changes, such as additions or deletions, you command D and those changes are noted apart from the directory before such changes were made.

A> X B: <RETURN>

This directory command gives you exactly what you see above in the example for XDIR, therefore it will not be repeated.

A> SD-44 B: <RETURN>

(note: also see review in Vol. 2, # 3, of the Newsletter)

ALPHA . 2K BETA .TXT 10K GAMMA . 4K DELTA . 6K .

->Drive B, user 0 contains 22K in 4 files with 164K free

A>ALLOC B: <RETURN>

This, too, is not a true directory; it does tell you how the space on the disk in drive B (or other) is allocated. In our example:

2K/bit; 4K dir. + 22K files + 164K free = 190K total.
11% full

A> DIRCHK B: <RETURN>

FILENAME	EXT	EX	RC	-----BLOCKS-----				
ALPHA			4	2				
BETA	TXT		65	3	4	5	11	12
GAMMA			17	6	7			
DELTA			33	8	9	10		

Number of files: 4
Number of blocks: 11
Number of actual directory entries: 4
Number of blocks remaining on disk: 230
Number of errors in the directory: 0

A>DIR22 B: <RETURN>

Name	Ext	Bytes	Name	Ext	Bytes	Name	Ext	Bytes	Name	Ext	Bytes
ALPHA		2K	BETA	TXT	10K	GAMMA		4K	DELTA		6K

4 File(s), occupying 22K of 186K total capacity
124 director entries and 164K bytes remain on B:

We think that covers all the "pure" directory commands on the 14 library volumes available so far. There are plenty more that deal with such matters as moving files, squeezing files to save time when transmitting by modem, ways to view files, compare files, or print files, etc. We plan future "comparisons" if this is helpful.

WHAT'S AVAILABLE

The public domain software library contains 14 volumes. They are available at meetings for \$5.00 each, or through the mail for \$8.00 each. Write a check to BAMDUA, Box 5152, Berkeley, CA 94705.

Back issues of BAMDUA Nesletter cost \$1.00 for issues 1-3, and \$2.00 for every issue after that. They are also available at BAMDUA meetings or through the mail. The price is the same either way.

Dave Block's Preliminary Question and Answer Book can be purchased by sending a check for \$1.00 to BAMDUA, above address.

We have produced a cassette tape of the "Once Upon a Morrow" meeting held in January. It will be sold for \$6.00. Order now!

REACHOUT can be bought for \$131.56 (includes tax and shipping). This program works for modems other than the Morrow MM300.

POWER can be bought fo \$95.00 through BAMDUA. This price includes tax and shipping costs.

SuperCalc 2 is \$130.00 (20% discount). Call for information in case this offer may no longer be possible.

To receive an issue of M.O.R.(there are two now), send a check for \$2.00 to M.O.R., P.O. Box 5487, Berkeley, CA 94705. You will be added to our database to receive future issues.

MULTIFORM is available for \$43. See "From the President's Disk" for additional information.

GRAFIKS 2.4 can be ordered with a \$45 deposit. See "From the President's Disk" for additional information.

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CONSULTANT WANTED: I am in the mail order business. I have a software program specifically for mail order. I have an MD-3 Morrow with New Word, Logicalc, Quest and Personal Pearl. I am in need of a consultant who is very familiar with the Morrow software programs who can look at my business and needs and possibly write additional programs and integrate all programs together. (Joe Hiross, 647-7904)

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FOR SALE: Morrow MP100, like new, \$340; Xerox 820 DS w/WS & SC2, \$980; Shugart SA 400 Drive, \$85; Morrow MDT60, new, \$275. H.L. Whitaker, 7603 Firestone, Downey, CA 90241; (213)566-3556.

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MUCHAS GRACIAS

Many thanks to the Newsletter Production Crew members who gave up their weekend to put this issue "to bed" and to the Newsletter Volunteers who helped get it ready for bed.

This includes: Sypko Andreae, Peter Campbell, Mark Condon, and Marc Norton.

Also, many thanks to the crew who copied the "Quest" library volume soon to be available. Thanks to the captain of the crew (and our new librarian) Gene Korte, and his crew: Russell Snook, Pat Curry, and Jay Hanks. Thanks also to Arthur Horn and Marc Condon for their prompt copying of previous library volumes.

-- Georgia Babladelis

The Great Invocation

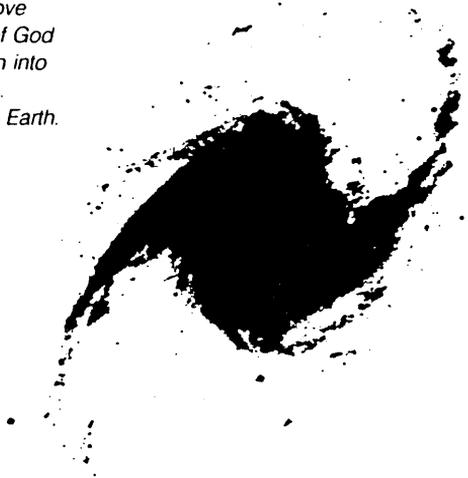
*From the point of Light
within the Mind of God
Let light stream forth into
the minds of men.
Let Light descend on Earth.*

*From the point of Love
within the Heart of God
Let love stream forth into
the hearts of men.
May Christ return to Earth.*

*From the centre where the
Will of God is known
Let purpose guide the little
wills of men—
The purpose which the
Masters know and
serve.*

*From the centre which we
call the race of men
Let the Plan of Love and
Light work out.
And may it seal the door
where evil dwells.*

*Let Light and Love and
Power restore the Plan
on Earth.*



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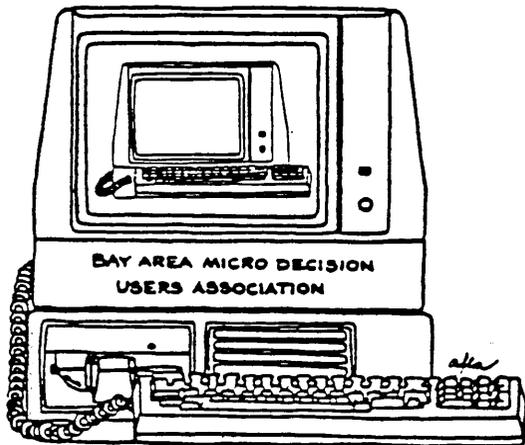
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