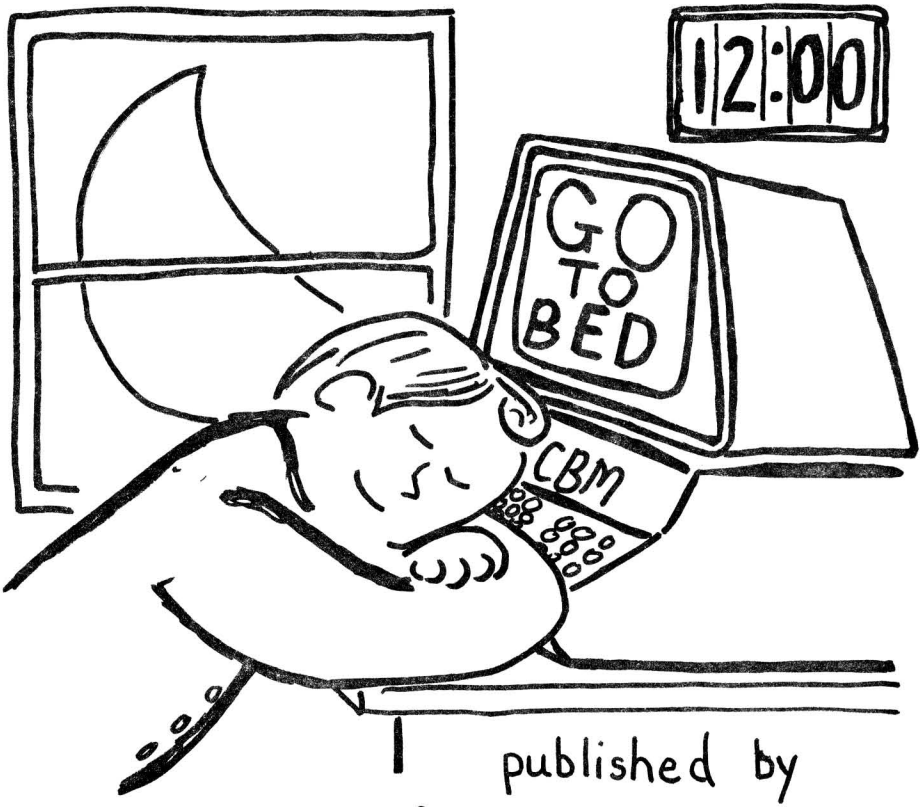
MIDNITE SOFTWARE GAZETTE



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Summer '81

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GREETINGS!

Well, we made it! This is Issue #4, the official end to the first year of the quarterly Midnite Software Gazette, published by the Central Illinois PET(tm) Users' Group. Our deepest thanks to all of you who have contributed reviews & gifts to make it possible. And what do we have to report to you after a year? Read on for the re-emergence of PETdom's first great author, a report on PET MECCA, some reviews of the latest PET products, & a new address for the Midnite.

That's right, we're moving -- still in Central Illinois, but no longer in Decatur. This will complicate matters for you a bit, but not much. From now on, please send your mail to the three addresses below, depending on what you need:

1) Send self-addressed stamped envelopes & guest reviews for the Midnite to JIM OLDFIELD at:

CIPUG
635 Maple
Mt. Zion, IL. 62549
217/864-5320

2) Send exchange programs & requests for Asm/Ted Users' Group disks to BRENT ANDERSON at:

ATUG
c/o 200 S. Century St.
Rantoul, IL. 61866
217/893-4577

3) Send correspondence for JIM & ELLEN STRASMA to:

Jim & Ellen Strasma
Box 647 (400 6th St.)
Pawnee, IL. 62558
217/625-7494

We apologize for leaving our address out of the last issue entirely. Some of you were very creative in finding us! Part of the reason for the multiple addresses is to divide the load of caring for your needs more evenly. It was getting a bit heavy for the Strasmas. Also, they are doing a new project this summer: editing the third edition of the Osborne/McGraw-Hill PET Users Guide. Readers with suggestions are urged to send them to the Strasmas. They hope the manual will be even more helpful to you than Midnite.

WHAT ABOUT ADVERTISING?

We did a bit better than we'd expected with the last issue. It got out the door for $100. Since then, we've received about $180 in gifts, making this issue possible without pain. But as the Midnite keeps growing, we've got to find a better financial arrangement. We're not willing to constantly beg for money. Nor will we go to the trouble of a subscription fee, with all its book-keeping. The problem is the classic one of a growing business--more copies are needed each issue, but added gifts come only after the added expenses. We are open to any suggestions you have, & ask your opinion of the ideas that have occurred to us.

For instance, we could accept advertising. We're about the only PET publication that doesn't. It isn't reasonable to expect users to donate as much for a quarterly newsletter as for Byte. Advertising covers much of the cost of the big magazines. We've asked a couple of you about ads, & received mixed reactions. Some companies would be glad to advertise in Midnite. However, we hear regrets about losing objectivity as a result. Since it's easier to define

feelings with an example, this issue includes 1 sample 'ad' from a new PET user group. This ad would cost $25. Companies would send 8-1/2 by 11" camera-ready copy with cash in advance. It would have taken 5 ads to pay for Issue #3, & added 4 pages.

On the other hand, if we skip the ads, we could ask our commercial friends for support in two other ways: 1) We could have a permanent reference section at the end of each issue, & charge each company a fee to be listed in it, even when they have no product reviewed in that issue. This might grow into the huge reference guide beginning each issue of the old PET Gazette. 2) We could honor sponsors who donate a certain amount of money. For instance, many groups publicize patrons who give $20 or more & sponsors who give $100 or more. (We have already received gifts at both levels.) 3) We could do both, by starring the names of sponsors in the reference section. The idea is that users, out of gratitude, will buy from our sponsors.

Let us know what seems best. If what we're doing is worthwhile, (and you've all said it is), it can & will be supported. That's our experience in the Church. (Brent, Ellen, Jim & Jim are all active in the United Methodist Church.)

GUEST COLUMNS

To further spread the load of producing the Midnite, we plan to include some guest columns, to cover Commodore rumors, hints, & such that JS has done in the past. This issue we have a great treat for you: Len Lindsay's report on the NCC (National Computer Convention) in May. Welcome back to the PET world, Len!

RE trademarks: PET, CBM, & VIC are from Commodore; Apple is from Apple; Atari is from Atari; & TRS-80 is from Radio Shack.

My period of recuperation is over, & I am back & ready to go. Some of my past readers thought I had died, while others thought I had switched camps (meaning given up on PET & switched to BRAND A). You will be happy to know that PET/CBM still remains my favorite computer. For the last 3 years I have always recommended it to others who asked me which computer to get. Many did not buy a CBM. One bought a TRS-80, & now is planning on selling it in favor of CBM. Others bought an APPLE due to its professional image in the ads. They then found out that it was not all the ads led them to believe. As for ATARI, I think it is a well designed system, but the quality of the components appears poor, & the so called repair centers do not know how to repair them. But now I am back & have agreed to write "1" page for Jim in his Midnite Gazette.

I am very pleased that Jim's doubles in size each issue, & is sent to twice as many people (tho costs are 4 times as much). Which leads me to a somewhat related point...when you write to someone asking for advice or information, always include at least a SELF ADDRESSED STAMPED ENVELOPE (SASE). Answering just 10 letters a day for 1 year would cost $650. A pre-addressed envelope makes it easy for the person to quickly answer your question (often on the back of your letter) or enclose the information you request.

"Commodore is really thinking BIG now. (They have more things up their sleeves than I have sleeves!) I was 1 of the lucky few to attend their private press conference during the NCC in Chicago. I was very impressed! The conference first let the press in on 1 of Commodores big secrets: Commodore is selling computers! What they meant by this was that until recently, Commodore made computers, but did not advertise or support them well (at least in the USA). Now Commodore has finally decided that good marketing & advertising should accompany a good product line. And boy, what a product line! My personal opinion is that Apple is in real trouble. If you thought Apple was comparable to the CBM, but just a bit higher priced, think again. Now, for just $200 more than the recent list price of the CBM 8032 computer, you will get a SUPERPET (9000 series) computer. Now that sounds like a lot, but it really is. Here is what Commodore will sell for only

$1995:

CBM 8032 with 96K RAM memory, dual processors (both 6502 & 6809), standard Commodore BASIC 4.0, microBASIC (also known as structured BASIC or WATERLOO BASIC), microPASCAL (an interpreted PASCAL), microFORTRAN (interpreted), microAPL (only 2 features left out of a complete APL language & character set), 6809 Assembler WITH linker, microEDITOR, interactive debugging (including SINGLE STEP & more), 6809 machine language monitor, & built-in option of using the machine as an intelligent terminal (even with a set-up menu for you to tell it how to act in terminal mode), plus an RS232C Interface (up to 9600 Baud). That was a mouthful! And the price is under $2000. Now I hear you saying, how can that be? The 8032 all by itself recently cost $1800. AHA! That's why its price was just cut $300 to $1495. Superpet, along with most of the other new products, will probably not roll off the assembly lines till late SEPTEMBER 1981 (if all goes well).

Prices are not the only thing that were dropped. All PET/CBM's now have the big 12 inch screens, but only display 40 columns. This will standardize the 'box' used for Commodore computers. The bigger screen doesn't cost them any more than the smaller one. Now if Commodore were really smart, they would have the screen software selectable between 40 or 80 column display (idea from JS), which would allow compatibility along with real flexibility.

More news from that private press conference included MINNIE WINNIE (miniature Winchester hard disk drive) storing 6 MEG, compatible with the 8050 & 8250 floppies at an undisclosed price (but watch for a real bargain here). It will come in 3 flavors (as Commodore put it): the single Minnie Winnie, a dual drive Minnie Winnie in 1 box (very similar to the 8050 box), & the Minnie Winnie with 1 of the drives from the 8250 DISK.

Yes, I know that you don't know what the 8250 Disk is: ANOTHER new product. It is a dual Mini-Floppy Drive unit that looks just like the 8050, but stores 2 MEG on its disks. So you can back up your Minnie Winnie with only 6 diskettes. Look for it to list somewhere around $2095.

Yes, the long awaited (coming in a few months?..) single floppy MAY finally arrive as the 2031 (unless they change its name to 4031 to go along with the number changes of the printers & floppies not in the 8000 series). It is supposed to appear for only $695, & still retain all its smarts (this is 1 product I have to see to believe). This drive supposedly configured to run on the IEEE-488 like the others, or in serial to run with the VIC-20.

Which brings up the VIC...also referred to as the VOLKSCOMPUTER in Commodore literature. It is in production now, & costs only $299. Just plug in your Commodore PET cassette unit, hook into your TV antennae screws, & you are off, with full color & sound--all in standard PET BASIC.

If I haven't taken your breath away yet with new products, let me conclude with the Commodore COLOR COMPUTER. It is a CBM 8032 with 96K, dual processors (both 6502 & 6809), BASIC 4.0 & a beautiful, superb quality high resolution RGB color monitor. Yes, it has color graphics extensions to BASIC 4.0. The text can be printed in 8 different colors, with any of 8 different background colors, & you can mix them as you like, since the color is part of the video screen attributes. They are as easy to read as the 'green screens' (not fuzzy & hard on the eyes like the APPLE). Commodore did not fall into the Color Computer trap by saying 'just hook into your TV.' Using the TV is just fine for a low end computer using only 22 characters per line like the VIC, but not for a screen to be used for word processing & the like (but a steep $3495 price tag). Now it is anti-climatic to mention the fact that both of the new machines have 96K AND use the 6809 microprocessor.

No, Commodore is not abandoning the 6502. In fact, watch for a souped-up version to be coming out soon, running at more than double the clock cycle speed, and maybe even 16 bits? No, the 6502 will still be used. It is just that Commodore is now also making the 6809 microprocessor.

Do I even need to mention the fact that Commodore stole the show at NCC? But with all the above announcements, there still was more they DIDN'T mention. No one seemed to know anything about COMAL, a new Language interpreter, developed in Denmark for Commodore England. Seeing an announcement for COMAL is what brought me back out of hibernation. COMAL looks like the language I've been waiting for. It's powerful & structured like PASCAL, yet it's easy to learn & use, like BASIC. I finally had to call Commodore England to learn more about the new Commodore COMAL interpreter. I believe in COMAL so strongly that I've started a COMAL USERS GROUP for it, to spread information about COMAL to anyone who is interested. The interpreter won't cost you several hundred dollars either, like the Commodore England PASCAL compiler listed at 120 English Pounds (is that about $300?). The COMAL interpreter for the CBM is in the public domain, ie. uncopyrighted. The COMAL USERS GROUP will provide a copy of the interpreter with any Users Group Disk. (Both Commodore England & Commodore USA have granted us permission to distribute the Commodore COMAL interpreter.) Commodore England specifically states in their newsletter to NOT apply directly to them for a copy. They are letting the user groups in Europe distribute it for them. And don't contact Commodore USA about COMAL either. They told me that for the time being, they will NOT be supporting it. To get more info, send a large SASE (35 cents) to the COMAL USERS GROUP, 5501 Groveland Ter, Madison, WI 53716. To use it, you need a 32K (minimum) PET/CBM (8032 or 4032 so far) with a floppy disk.

Now, I don't want you to go away thinking that I have been hired by Commodore, with all the glowing comments above. Anyone who knows me also knows that I wouldn't fit in with their organization. I like to say what I believe, which is not always favorable. For instance, anyone foolish enough to subscribe to the Commodore (USA) PET/CBM NEWSLETTER (called INTERFACE) should request their money back immediately. Why send $15 ($25 foreign) for a subscription, when it is virtually worthless? For only $11 you can subscribe to the Commodore (CANADA) TRANSACTOR. The TRANSACTOR is very informative & worth the subscription price. Let me explain what appeared in the last 2 issues of INTERFACE (confusing name since there already is a magazine called INTERFACE AGE).

INTERFACE is labelled bimonthly. (The last 2 issues were FEB 1981 & MAY 1981. Sounds quarterly to me). Each is mainly advertising of Commodore products. 1 page of new products would suffice, along with a separate catalog listing all products. You shouldn't have to buy catalogs.

One 'article' was ADDING SOUND TO YOUR PET. Now, this is ridiculous... In July 1978, I published a full page article in the PET GAZETTE, explaining the same thing. I even went on to suggest 2 STANDARDS for PET sound, & included a 2-page article explaining how to get specific notes using the SOUND CONVENTION. Commodore wouldn't help standardize user port sound. Now, after everyone uses this method, Commodore bravely tells you how to do it.

The other real 'article' in the FEB 1981 issue was called BASIC, MACHINE CODE & ASSEMBLY LANGUAGE--AN INTRODUCTION. That struck me as funny--an introduction to a high level language, low level language & pure machine code, all on 2 pages.

The May issue was pure Commodore promotion: dealer list, a list of the 5 people responsible for the issue (is responsible the right word?), product announcements (1 page on SUPERPET & almost the same for a Thermostat!!!), an explanation of OZZ (data base manager), explanation of Legal Time Accounting software package, mention of their new PET/CBM SOFTWARE ENCYCLOPEDIA, VIC computer update, & an ad for the MOS Hardware & Programming Manuals. VERY little newsletter! After cancelling your subscription to INTERFACE, send $11 to The TRANSACTOR, Commodore Business Machines, 3370 Pharmacy Ave, Agincourt, Ontario M1W 2K4, CANADA.

That's it for now. I can be contacted at 5501 Groveland Ter, Madison, WI 53716. (remember a SASE if you wish a reply).-Len Lindsay

TRIP TO PET MECCA

"Never trust a computer you can't carry."
-- James Finke, Commodore's president, in Dallas - May, '81

In Mid-May, the Strasmas toured PET Heaven, the area around Toronto, Ontario, Canada. Here are some of Jim's impressions:

The Toronto Pet User Group is well on its way to 500 members, growing by several dozen members everytime I get a report! Well over a hundred were present in May for the West side branch meeting held at Sheridan College, home of over 50 PETs. I'm told Commodore has 96% of the education market in Ontario, & I believe it. The ECOO (Educational Computing Organization of Ontario) conference in mid-May was mostly PET. The Commodore booth had all the attention, showing both VIC & SUPERPET. Waterloo University, designers of Superpet, explained it in some detail. The Basic & APL in Superpet will be syntax-identical with the same languages on the IBM Series 370. Much is made of CP/M's 4 year software library, but IBM's is obviously FAR larger. SUPERPET can chat with an IBM at up to 200,000 baud on a special shielded line, or at 9600 baud in ordinary RS232, from ANY of its several languages. The SUPERPET languages are interpreted now, as you would expect in an educational machine, but compilers should follow, since Waterloo U. wrote the IBM compilers. COBAL won't be out before year end. The guy who will write it has 2 other prior jobs to finish first.

Commodore Canada really has its act together! The plant is modern & efficient, the staff seems happy, loyal & highly-skilled. Dealer & user relations are excellent. I'm sure this is one reason PET dominates the area. And talk about roasting Commodore...I've never seen so many BBQs! The same plant that makes 4040 & 8050 disk housings also makes most of Canada's outdoor barbecues.

It was great to meet people I've heard so much about. Karl Hildon, editor of the Transactor, Jim Butterfield, guru of the PET movement, Steve Punter, author of Wordpro... not to mention so many others.

Steve has a new PET Bulletin Board System modem answering program available for about $175, as good as anything I've seen for Apple. The software to call it is FREE. You can even download it from the PBBS yourself if you already have an earlier version & know a not-very-secret code. Yep, reliable uploading & downloading is one of its features. Versions are available for the CBM modem & for the NEECO Intelcom user port modem interface. Steve's PBBS answers at decent evening hours at 416/624-5431. (But don't call during sleeping hours.) ATUG will soon have the terminal programs on its 'UE' disk. Punter's PBBS uses a CBM modem to answer calls, assisted by a hardware circuit handed out at the May TPUG meeting.

TPUG is accumulating a HUGE library, all well-organized. ONLY user groups may requests disks for $10 each, US or Canadian. (Don't send disks, just money.) They have a neat Disk-of-the-Month, which is the only thing copied at their meetings, & also available on cassette. Their librarian is David Hook, of 58 Steel St., Barrie, Ontario, Canada L4M 2E9.

While in Canada, we saw several new products of all types. Among these was a pre-release version of BMB's highly touted $225 DATA MANAGER, since verified as received by a US customer. Once the Canadian mail strike lifts, I hope to test & report on the final version. I promised not to report on the preliminary, but I will say this one has REAL potential. To give only the most obvious reason, it does much of what competing databases do, but is totally user-modifiable, even though it's also totally protected. The trick is BMB's special dongle (key). It's like the one on CBM's WORDCRAFT, but far smaller & easier to take along.

Also seen, & admired by us was the pre-release version of RTC's mail list & word processor from Peter Smith. It should be dynamite in applications needing hundreds of standard paragraphs to be combined in various ways & sent as letters to hundreds of people at once. Again, we'll say more when we see a final version. REVIEW: THE CARVERY smorgasbord restaurant. $14/person. For all PET-owning

tourists in Toronto. Beautiful decor & excellent food in the heart of the city. Partner, Jim Butterfield, has rigged it with a computerized bar, (untested by reviewer). Specializes in meats, such as Roast Duck. Highly recommended!-JS

LATE-NEWS FROM THE COMMODORE HOTLINE

The IEEE interface version of the 2031 single-disk drive, which I first saw at NCC, is now in final testing. It is half a 4040, with all the same smarts. Should be at your dealer's by the end of September, along with the first edition of the series 9000 SUPERPET. This first SUPERPET will be as it was shown at NCC in May, with 2 add-on boards instead of the single one predicted earlier. Eventually, a single add-on board version is still expected.

You may already have read in other publications, about SEARS's search for a computer line to carry (& about 5 special stores soon to open). They are supposely negotiating with Atari (to be dropped?), Apple, & Commodore. According to a non-Commodore source who ought to know, SEARS is big on CP/M, & Commodore would very much like SEARS to carry the PET/CBM line. Apple pulled a fast one with a card allowing the Apple to speak CP/M (tm Digital Research). Don't think that Commodore is going to be left in the dust, however! CP/M is coming for PET, by year end, according to Hotline! To run CP/M on the PET, a Z-80 chip & add-on memory are required. There are 2 contenders. One is from Lifeboat Associates; the other is from Madison Computing. The Lifeboat one is currently favored, primarily because of Lifeboat's software, but both may make it to market. 100 copies of another 64k add-on RAM board, which was to have been the 8096, have already been made. Many of these are in the hands of major PET software developers. Memory-gobbling versions of WORDPRO, WORDCRAFT, VISICALC, USCD PASCAL, & various other programs are being developed, for use with the CP/M boards.

Users must choose between the SUPERPET & CP/M, since the 2 tie up the same space on an 8032's motherboard. It won't be an easy decision, as both products should be wonderful.

Don't hold your breath waiting for the serial version of the 2031 disk. Commodore may decide to go with just a VIC-to-IEEE interface instead. (That makes more sense to me--who needs more incompatible Commodore equipment?) The FCC-approved version of the VIC was scheduled to go into production on July 1st. It is shielded, & the main board thoroughly redesigned as a result, but is said not to include any new features, such as add-on RAM sockets. (Based on the interference one early one caused on my TV, wait for the FCC version. You'll probably have to anyway; they're selling faster than they can be made.)

All disk units now use Tandon Magnetic brand drives, said to be better than the Shugart & Micropolis drives previously used. When the 8250, the double-sided 8050 disk appears, it will have DOS 2.7 in it. This new DOS is said to be fully compatible with the current DOS in tests thus far. It's intended to be more fully documented, in terms of memory maps & such, than earlier disk operating systems. According to other sources, it may also include a copy protection feature. The Hotline folks aren't aware of any plans to make DOS 2.7 available to owners of 8050's & 4040's.

Due to the huge 2 Meg capacity of the 8250 drive, the 8061 & 8062 8" disks probably won't appear in the U.S. They may be used in Europe, however. Their main virtue is that they are IBM compatible. In addition, they may include some fancy built-in functions on disk, such as "string-search" or "sort".

The new 12" screen versions of the 4016 & 4032 computers will not run WORDPRO 3 as is. One poke is said to be needed to fix the program. Some other fancy programs may also fail with the new edition. Apparently, the 2K ROM at $E000 has been revised, as in the 8032. Alas, the 9" PET is no more.

According to outside sources, the CBM COLOR COMPUTER at NCC may have been a promotional gimmick, rather than a serious product announcement. I hope it wasn't a fake, because it was a dynamite product. Apple, Atari & TRS-80 Color sets aren't even in the same league! Another reason I hope it wasn't a fake is that

the World is just beginning to trust Commodore product announcements again, & doesn't need any more cancelled or delayed products.

The INTEGER COMPILER should be hitting the streets as you read this. It had been held up, waiting for a manual till recently. The 8032 version of Pascal probably won't appear after all. A full UCSD version from Softech, for the CP/M boards is coming instead. The other new package due out is MAS, a medical accounting package, from Cimmarron, the same folks who brought you LTA (Legal time accounting).-JS

Besides the wonders seen at NCC, two other major events have happened to bolster my faith in Commodore's future:

1) they actually replied to our request for information at NCC, with a letter telling us about TWO toll-free numbers to call for further information, & the addresses of the 7 U.S. regional offices. The toll-free numbers are: 800/523-5622 for technical info, & 800/523-5614 for everything else.

2) Main Street Computers in Decatur, which was 'Apple all the way' a year ago, is now a proud new Commodore dealer, & intends to support it thoroughly, with the same effort that has made them the leading independent Centronics service center in the country. Welcome aboard, guys, & obviously, they know quality when they see it. They feel the Commodore will make a dynamite word-processor that even beginners can use. Well, I've been saying Word Pro is the best word processor available on any micro for over a year now, so I think Main Street is onto a winner. Their philosophy is to sell the whole package: 8032, disk, Wordcraft 80, letter-quality printer & SERVICE at one price. Now THAT's the way to compete effectively with mail order prices.

One final bit of praise for Commodore from an independent source. Datapro Research Corporation of Delran, NJ, reports, in 1980 Commodore & Apple tied among the top 10 brands of personal computers in user satisfaction. Of popular brands, only Ohio Scientific's CHALLENGER got a slightly higher mark. Not bad, considering the heat CBM took from Apple-happy users & dealers in '80.-JS

BUGS

If you have diskettes containing DOS 1 random access files, you can't move them from DOS 1 to DOS 2 with the COPY or BACKUP commands. You must write a program to read & rewrite the files, no easy task.-Doug Dachenbach

Our local dealer has had an amazing failure rate on 8050 disk drives; nearly all the drives received in the past few months were dead or ill on arrival. Other dealers tell us the 8050 is very reliable for them. So what's the story? Well, 3 of the units had problems anyone good with an erector set could fix--LED in backwards, connector unconnected, & small part clear out of place. The rest were a mystery till we contacted Bill Seiler. It turns out the 8050 drives are intended to float freely within their mounting case. However, in shipping, the outer case flexes against the too-tight front cutouts, thus bending the drives. This in turn misalligns the heads, which are very critical on this octal-density drive. Moral of story: dealers, learn how to reallign Micropolis drives. Now that Tandon Magnetic drives are being used, the problem may go away.-JS

Practical Computing, in its March '81 issue said that owners of Basic 3.0 TOOLKIT ROMs can 'poke14,0' just before a FIND or DUMP command, to make paper printouts format correctly. (How about a review of this mag, gang?)

ANNOUNCING A ROM-NAMING CONTEST

Since 2 years have passed without the various Commodore departmentsagreeing on the name for the 1st ROM set used on the 40 column large-keyboard PETs, we hereby invite our readers to make the decision. The Commodore User Club Newsletter, in

announcing the availability of "upgrade" ROMs for older PETs to give them the same basic as the large keyboard models, called the upgrade BASIC 2.0. For the next year, this was accepted as the title within Commodore, although there had been another upgrade a year before, called the "019" ROM. During this time, a BASIC 3.0 was developed within CBM. It changed only the method of garbage collection in string-handling, & was never released. Then came BASIC 4.0, whose name everyone accepts because they must. It, thanks be to the genius who thought of this idea, gives its name in the sign-on message when PET is switched on. Thus, according to the CBM engineering department (confirmed by logic), there was first BASIC 1.0, then BASIC 2.0 & now BASIC 4.0. However, someone wondered what happened to BASIC 3.0, so the CBM software department filled the gap (& perhaps countered the Apple III as well) by calling the BASICs, 2.0, 3.0 & 4.0 respectively. Personally, I am not impressed by revisionism, & I worry just as much about missing BASIC 1 as I ever would have about missing BASIC 3.

To show this is not a trivial problem, there is a BASIC 5.0 already completed, but unreleased, in favor of a coming BASIC 6. I am sure a large number of Commodore computers have gone unsold, due to the confusion over all these mutually-incompatible ROMs.

The best solution would be for Commodore to enforce uniform naming on its various departments. May that happen soon! Meanwhile, we use 1.0 to refer to PETs with the first release of BASIC, both 011 & 019 ROMs. We use 4.0 for the BASIC in the 8032, which is nearly the same as the variants for 40 column PETs. The in-between BASIC may be called 2.0, as it was in the beginning, or 3.0, to clearly differentiate it from both 1.0 & 4.0.

The prize for the best name? Ah yes, it's one of the ROMs that did NOT win a free VIC at the Commodore booth at NCC in Chicago!

Here's a list of "recalled" ROMs we've heard about:

1) 011 ROM in Basic 1.0, replaced with the -019, to make PET quit going out to lunch unexpectedly after editing screen row 25.

2) 3.0 Basic ROMs for those with Basic 1.0 who buy a CBM disk drive, since the disk won't work with Basic 1.

3) -04 ROM for CBM 2022 or 2023 printers. This one allows easier printing of lower-case text than the earlier -03 ROM. However, it has its own bugs, so may not be available any more. An -07 ROM has been rumored, but not seen. The 2022 & 2023 have been discontinued.

4) DOS 1.2 for the 2040 disk, replaced with DOS 2.1 - DOS 2.7 is being developed, possibly for the 2040.

5) -23 ROM to replace the -19 ROM in Basic 4. Keeps a check for disk status from taking PEt out to lunch.

6) -07 & -06 ROMs to replace -03 & -04 ROMs in the 8050 disk. Improves reliability, according to source Mike Kourie.

The upgrades are recommended, if your PET accommodates them, & most are free.

XRAYS

"Comment about the note concerning xrays & diskettes in M#3. (My scientific background is in this field.) The problem is in the pulse nature of the Flash X-ray devices used for baggage inspection. These devices typically discharge a very high voltage capacitor onto a vacuum load in a very short time period. This is a messy operation which results in a high frequency (rf) discharge. This magnetic field is what does in the disks just like a super demagnetizer. The aluminum wrap builds a 'screen house' which can partially protect the disks. My advice is that you never let magnetic media go through this sort of inspection since it means the disks get close to the rf field. Furthermore, you should make a point of keeping your disks (& tapes) as far from such devices as possible. The public is protected fairly well from X-radiation by the built-in shielding, but

it appears no one gave much attention to the rf problem associated with these units."-Quintin Johnson

A Canadian PET user commented during our recent trip, that British X-ray scanning for letter bombs is so powerful, especially in the southern part of England, that it's a wonder any disks or tapes survive the check at all.-ES

Several people have warned us about leaving magetic media next to telephones. Even if 6" away is "safe", who wants to take the chance of erasure when your computer buddy gives you a ring?-ES

DEALERS

AB COMPUTERS. "As a dealer who is providing complete service & customer support, I don't appreciate mail order firms who undercut retail prices (which already have such low margins for the dealer.) Case in point: I spent 30 hours off & on with a potential customer in our town, demonstrating machines & software, & giving him the benefit of much time & money spent in researching resources. He made his list from this & got prices from AB COMPUTERS which were very close to the wholesale prices I pay as a dealer. He gave me the opportunity to match them, which I refused to do. There are a lot of expenses that have to be paid for out of the meager mark-up, including demonstration & consultation time, plus all labor required under warranty. Result--he bought his boxes from AB Computers, & guess who he came to for help after they arrived? That's right, his local dealer! I don't know of any dealer who is willing, more importantly--<u>who can afford</u> to give free local support to cut-rate mail order houses."-Bob West

EDITOR'S NOTE: Which is more important to you, buyers, fast local service (especially later on) or low initial cost? All Commodore dealers are required to service their products. For users with limited patience & imperfect understanding of computer problems, local dealers are worth their weight in gold. Mail-order houses serve a purpose, too, by providing discount prices to experienced users who don't mind the time, postage & phone costs of support by mail.-ES

COMPUTER MAIL ORDER. "They were very friendly & a pleasure to deal with. Just order by phone & have a money order ready when the goods are delivered. My 4022 arrived within 5 days. It suffered slight shipping damage (a bent paper advance knob). I was informed in a quick call to CMO (via their toll free number) that I could sent it back, take it to a local Commodore service rep, or attempt to repair it myself. I opted for a 4th alternative. I ignored the problem."-Greg Johnson.

EASTERN HOUSE SOFTWARE. [Tongue-in-cheek dept.] "I must say I am very disappointed with Carl Moser & EHS! It took him almost 4 business days from the time I called him to send a version of MAE for BASIC 4.0. But seriously, he even sent it without waiting for payment. I feel $20 for an upgrade on a $170 package is very modest. This has to be one of the best companies around!"-Ralph Bressler

FANTASY GAMES SOFTWARE. "I purchased ESCAPE FROM THE DEATH PLANET from Fantasy Games Software & after having difficulty in getting it to load from my non-CBM cassette I wrote for help. They were very prompt in replying & referred me to their "troubleshooter" Jerry Pietenpol, in Raleigh, NC, & from him I received a 2 page typewritten (single-spaced) response along with a new cassette in exchange for the one I was having trouble with and some "Q-tips" & instructions for cleaning my tape recorder. In short, I was amazed at the effort this company was taking to support a customer."-Clark L. Stewart.

HUMAN ENGINEERED SOFTWARE. "Received HESLISTER without changes to recognize Basic 4's commands. A brief letter resulted in a new copy that works very well on all basics, a letter of apology and some very nice additional routines for the

inconvenience! HUMAN ENGINEERED SOFTWARE is not a name but a fact in their business!"-Jerry Key

VIRGINIA MICRO SYSTEMS. "I would like to praise the men...Stu Mitchell, Roy Busdiecker & Phil Poole. They have been very sensitive to my needs & respond, as did you all, to my requests for help."-B. Earle Mountcastle.

A word to the wise, dealers...when Midnite writes you to suggest you have an unrelated, representative customer send us a review of one of your products, it is very bad form to reply with an envelope containing nothing but an ad. If we hadn't already seen an ad, we wouldn't write! Getting nothing but what we don't need tells us a lot about the support users can expect from your company.-JO

USER GROUPS

Midnite #5 (targeted for Fall '81) will list as many user groups as we can. We hope there is interest in having groups offer specialized software exchanges. Each of the hundreds of existing groups could handle a category or 2 for its region & maintain those programs better than most groups now maintain their huge general libraries. Here are a few groups that already specialize:

COMAL USERS' GROUP. For Basic 4.0, 32k & CBM disk. Interpreted structured language. 2 reviews of promotional material arrived, both complaining that this "free" language costs at least $13. Normally, I would not review this material myself, since I helped the group get COMAL. However, I will comment, & invite user reviews: COMAL combines the best of both Basic & Pascal. Almost any command or statement that either accepts is usable in COMAL, except "goto line#", a "no-no" in Pascal & COMAL. Version 00.12 comes in 2 formats, 28k all-in-1 & 2 part 16k format (half for editing & half for running). Organizer Len Lindsay treats this as a first-class project, comparable to CBM PASCAL. Recommended $40 package includes well-done COMAL 3-ring binder, vinyl pages protecting a list of keywords & user group diskettes (with many good demo programs), CBM COMAL manual & COMAL group quick-reference manual. A ROM version of COMAL is rumored. As a language, I find it fantastic! Very much like WATERLOO BASIC on the forthcoming SUPERPET. A natural for school use. Highly readable programs. Includes many extended editing helps. Despite complaints, the prices are reasonable. It's hard to organize, duplicate, & mail a diskette full of programs for less than $13 if you value your time.-JS

PERPETUAL PET PROGRAM PYRAMID. Mentioned in M3, it was actually started by Gary Stone, but never reached "critical mass". He's still looking for a "decentralized, distributed network approach" for "PET program and idea exchange." Write him at P.O.Box 153, Annapolis Junction MD 20701.

PET BENELUX EXCHANGE is not at the address in M#2. Reach them c/o Johan Smilde, COPYTRONICS, Burgemeester van Suchtelenstraat 46, Deventer, Holland, 7413 XP

SEMPUG (Southeast Michigan Pet User Group). Started in May, emphasis on machine language applications & education. Meets 2nd Tues (even mos.), 2nd Thu (odd mos), at O.E.Dunckel Middle School, 32800 W. 12 Mile Rd., Farmington Hills MI 48018. For more info, contact Norm Eisenberg at the school. This group now has all 7 Commodore Education Advisory Board (CEAB) public domain program diskettes in its exchange.

SPCA (Sun Coast PET Computer Association), 6219 Thirteenth Av. South, Gulfport, FL 33707. Specializing in business & utility programs. Has Bennet's Mail List disk with instructions. Copying fee of $8.

COMMODORE CANADA has released 7 diskettes of public domain programs via the COMMODORE EDUCATION ADVISORY BOARD (CEAB). These diskettes are sent FREE to all Commodore Canada dealers AND TO ALL REGIONAL U.S. COMMODORE REGIONAL OFFICES, who may then distribute them for a reasonable copying fee. None of our U.S. contacts have been able to get these diskettes from the U.S. regional offices. Therefore, contact BILL SHEA (of SEMPUG) at 3910 Orchard Hill Drive, Bloomfield Hills MI 48013 (313/642-8627) for info on how to get the CEAB diskettes. He is also trying to establish protocols on distribution of other U.S. educational programs (i.e, are they exchangeable?, how much to charge for copying?).

SOFTWARE NEEDS

We often receive requests for new program applications & have to let them sit until someone else writes in with a similar request. By then we can't remember the name of the 1st person who wrote! We will eventually put all this in a data base or refer people to area specialty user groups when they get going. Meanwhile, we'll try this method to speed up the process. If we have no immediate connection (program or user group) to suggest, we'll print your name, address & need here for others to contact you. If something comes out of it, send us a review of your programs &/or name of person or group to contact for the specialty. Here are the first requests:

Douglas Dachenbach, 159 N. High St., Gahanna, Ohio 43230, 614/471-7177, needs 2 programs:

COMPETITIVE SCORING program for an Ice Skating match.

OPTOMETRIST'S PATIENT RECORDS & MONTHLY BILLING program which can recall by letter at specific intervals 5000-20,000 patient records, with Jinsam's speed, Dr. Daley's capacity & flexibility, & Chuck Stuart's (CMS) accuracy! Has ANYONE met that criteria yet for an understandable data base (at a reasonable price)? He doesn't say whether 256 bytes in one patient's record is large enough either. Write him if you can TRULY meet his criteria. (How about contacting CIMARRON about their forthcoming Medical Accounting System? Also contact BMB Compuscience. they've got at least 1 happy physician customer.)-JS

Sam Cook of Cook Compusystems, 309 Liincolnshire, Irving TX 75061, 214/253-6979, would like OIL & GAS OPERATOR programs. He uses an 8032.

Joe Spatafora, of 6219 Thirteenth Av. South, Gulfport, FL 33707 has a long list:

1) A way to save arrays on disk in binary.

2) Appointment scheduler for 8 or more individuals, that interfaces with a client billing program. (Will Cimmaron's LTA & MAS do this?)-JS

3) A way to dump VISICALC formulas to printer. (Should just take a sequential file reader, with a bit of formatting.)-JS

4) Disk-based routine to do fixes needed on Apple programs loaded to PET.

5) 10,000+ word vocabulary spelling checker for WORDPRO.

Another user wants a dot matrix correspondence printer that works well, ie. can handle stuff like undeRlining, from WORDPRO & VISICALC.

JS is looking for the ultimate church package. And on that subject, here are 3 definitions from a free computer dealers' magazine that may help you define your needs:

Vertical Market Church application

Horizontal Market Funeral Home application

Copyright mark appearing even on paper towels in security-conscious computer companies; legally equivalent to a paper towel.

And don't forget the world still needs an 80 column conversion for all the 40

column PETs. At least 2 groups, in Madision, WI, & CA, are close to a solution. Tell us when the Millenium arrives, folks!

BOOK REVIEWS

COMMODORE SOFTWARE ENCYCLOPEDIA, $5 from CBM. A listing of commercial programs available from various sources to run on CBM & PET computers. The list is FAR from complete, & I presume Commodore won't guarantee some of the more outlandish claims in the descriptions of outside programs. One wonders how so many major software houses got omitted. The only 'rating' used is the corporate symbol beside CBM's own stuff, & "Commodore Approved" beside 2 other programs. Interesting that"Wordpro 4+" & "Visicalc" failed to gain approval. The book includes twenty pages of game listings, most of which are not worth cataloging. Sixty pages of education programs are, in vendor, not age level or subject order. Without some kind of rating, or at the very least, testing of vendors' claims, I certainly can't recommend using the book to select software for purchase. However, the most serious fault of the book is its labeling of CBM basics as "2.0, 3.0 & 4.0". A second edition is said to be coming, & software houses omitted in the first edition can get in by sending a copy of their programs to CBM's software department in PA. Most users will do well to wait for the second edition.-JS

The following book reviews are by F. Arthur Cochrane (thanks!):

BEYOND GAMES! SYSTEMS SOFTWARE FOR YOUR 6502 PERSONAL COMPUTER, by Ken Skier. Byte/McGraw-Hill. 433p. Book covers memory monitor for Apple, Atari, & PET. Source listing in back for monitor & BASIC programs for each machine to POKE code. With Supermon, Extramon & Micromon, why do you need another monitor?

PET & THE IEEE BUS, by Eugene Fisher & C.W. Jensen. McGraw-Hill. Great for person wishing to know how PET communicates with IEEE bus. Has IEEE to RS-232 interface circuit & programming examples. All bus transactions explained in detail.

PET/CBM PERSONAL COMPUTER GUIDE, by Adam Osborne & Carroll Donahue. McGraw-Hill. Best book for PET. 2nd edition covers 8032, BASIC 4.0, disk drive & printers. Memory map in back very useful for ML programmers; formats for variables also helpful. Page 383 contains error about PRINT# & carriage output. I don't go through the day without looking up something.
(The Strasmas are editing a forthcoming third edition, & would appreciate all such corrections.)-ED

PET INTERFACING, by James M. Downey & Steven M. Rodgers. Blackburg Series. Just received. Not only explains 3 (IEEE, user & memory expansion) ports of PET, but has accompanying experiments. Looks very good for person wishing to hook the PET to the outside world.

PET REVEALED, by Nick Hampshire. Good hardware description of PET, all in one book. All I/O chips covered in much detail.
(Even includes PET schematics!-JS)

PET SUBROUTINES, by Nick Hampshire. BASIC & machine language programs for inputting, sorting, plotting, tracing, repeat keys. Each program is listed from PET printer, has thorough description & list of variables used. Program disk available for $10 more.

PRACTICAL MICROCOMPUTER PROGRAMMING: THE 6502, by W.J. Weller. Northern Technology Books. $32.45. Hardbound, very thick, expensive. For APPLE user. Assembler source listing in back. Editor/Assembler available on APPLE II cassette

or disk. Most of book covers various parts of assembler. Useless for PET user, except to see source code & how an assembler works.

PROGRAMMING A MICRO COMPUTER: 6502, by Caxton C. Foste. Addison-Wesley Pub. Co. Very little use to me because it's for KIM-1. Contains mostly hardware experiments.

PROGRAMMING & INTERFACING THE 6502, by Marvin L. DeJong. Blackburg Series. 416p. Good book covering 6502 hardware & software; 1st half covers programming well, & 2nd half nicely explains interfacing to 6502.

PROGRAMMING THE 6502, by Rodnay Zaks. Sybex. 304p. I have the error-filled 1st edition, which should be corrected in later editions. This is 1st book I read on 6502, which thoroughly confused me on addressing modes.

6502 APPLICATIONS BOOK, by Rodnay Zaks. Sybex. 284p. Great for hardware nut to see how some experiments can be connected to 6500 series chips. Limited use for PET users.

6502 ASSEMBLY LANGUAGE PROGRAMMING, by Lance Leventhal. McGraw-Hill. 606p. The best book for Machine Language programmers to use in learning 6502 assembly language. Each instruction covered in detail, with many, many examples. Also covers 6500 series I/O chips. The first book that explained addressing modes in language I could understand.

6502 SOFTWARE DESIGN, by Robert Findly. Blackburg Series. 204p. Although mainly for the AIM 65, it has many useful routines quickly adaptable for PET. Good explanation of 6502 instructions & addressing modes.

6502 SOFTWARE GOURMET GUIDE & COOKBOOK, by Robert Findley. Scelbi Publs. Not as well written as other book on 6502. I prefer 6502 Assembly Language Programming & 6502 Software Design. Book does have many routines & if I didn't have the other two, I would use it more.

MAGAZINES

(The following guest review is more favorable than Len Lindsay's column.) INTERFACE, $15 for 6 "bimonthly" issues, from CBM 681 Moore Rd. King of Prussia, PA 19406. Long-awaited. Has many items of general interest to the novice. Very nice section on the VIC. Pretty good layout. Good supplement to anyone who owns or uses PET.-Mark Niggemann

THE PAPER, $20 from Long Island PET Society. Quarterly. This is the only U.S. PET journal still in continuous publication since 1978. It has had its ups & downs. When it was a "for profit" magazine published in Auburn, PA, I considered it strictly for idiots--amateur oriented, with little of substance except what came in over the transom from readers. But in the past year it has become something else; an excellent magazine for teachers & other less-than-full-time PET freaks. It has good articles & lengthy reviews. During the course of volume 3, the printing improved markedly, (just as ours did at Midnite). Still not for the same audience as MICRO, but the world is large enough for both. After a reader survey, publisher, Ralph Bresler has decided to go ahead with volume 4. If you like the idea of an independent U.S. PET magazine, you probably should subscribe. If you also are less than expert with PET, you certainly should.-JS

BUSINESS REVIEWS

BENNET'S MAILING LIST, by Chris Bennet. Available to user groups only from

Toronto PUG for $10 copying fee. Excellent, easy to use program for amateur PET user. Requires 32K, DOS 1 or DOS 2.1 & CBM or ASCII printer, plus 2 diskettes: 1st holds program & 2nd holds data for 600 records max. No manual, but usable anyway. Handles U.S. & Canadian postal codes, but not ZIP+4 as sent. Wish it came with a "remark" field in addition to its very useful "Code" field (up to 20 sort fields in a single field). Great for the home user (Christmas card & moving list) or for small business. Large, complicated mailing lists should try Dr. Daley's program above, or Peter Smith's soon-to-be announced Mail List.-ES

DR. DALEY'S MAIL LIST [Improved], $160 from Dr. Daley Software. Needs BASIC 3/DOS 1 or BASIC 4/DOS 2. Output to screen, printer, & user-defined sequential files for use in WORDPRO. 1 system master required per file, but 1 master controls up to 89 data disks, with up to 1340 records per 4040 disk. This allows 1 file to have several thousand records. Fast access only by record #, but searches up to 3 fields at once, including wildcard, at about 3 records/sec. All fields user defined (15 max.), with fixed record length of 117 characters. Input features include: auto repeat, defined duplicate, field from previous record duplicate, etc. Records placed in proper order & on correct disk, regardless of input order.

Good documentation, but not current with program. I have received about 5 updates thus far with another coming to correct printing & disk maintance bugs. Program needs house cleaning to eliminate screen errors & is ultra sensitive to disk errors. Hardware maintance is essential: disk heads MUST be cleaned regularly, & on 4040 disk, COLLECT must be run at intervals to keep directory free of pointer errors.

This is the only program I've seen that controls several thousand records in a single file & is so user defined in its format. A good buy at the price & will probably get better as Daley continues to update it.-Doug Dachenbach
(REPLY:)

Dr. Daley, from a phone conversation, feels some of Doug's problems may be due to changes Doug has made in the program. However, Doug is, from what I've heard, by far not the only user to have trouble with the program. Daley & user Chuck Spriggs have commented that this is not a program you can expect to use without serious preparation, or without a manual. Prepare to spend a full day with the manual, & beware of surprising side effects if you change ANYTHING. Dr. Daley has an excellent reputation as a PET programmer, spanning 3 years.-JS
(OPINION #2:)

Menu-driven program with overlays totalling aproximately 60K of BASIC & machine code. Fields within each record are user defined & print routine allows formatting of fields in any sequence & can prints labels up to 8 across. Directory allows up to 80 disks each with 1380 names to be maintained in zip code order (an advantage in bulk rate mailings which must be pre-sorted). Other features: re-sort, disk compress, wild card search, record update, & a useful routine to scratch dups or near dups. Input is error-proof & can be used by anyone. Several recovery programs included if errors occur (I've had none since changing to DOS 2.0). Well-written program; usable in business environment (ours has 5000 names). Can supply labels required by a mailing house & can be kept current easily. Several readings of 100 page manual & careful thought on initial setup important (i.e., will zip codes have 5 or 9 digits?). Updates available as Commodore products change by returning disk plus $15. Program & support have been well worth the cost. Good program, but takes time to learn to use it.-Chuck Spriggs

FLEX FILE, $60 from A.B. Computers. Needs CBM Disk with DOS 2. Versions for BASIC 3 & 4. Versatile Database manager with 18 overlay programs. Uses relative records. Fast access. Able to convert relative files to sequential ones & visa versa. This aids in changing file structure at any time. Defines 4 keys for sorting. Max. record size is 250 characters, field sizes not fixed. Includes tips for changing programs & using mixed BASIC/DOS versions. 12 commands for adding

your own routines. Excellent report writer with summing & totals.-Doug Dachenbach (REVIEW #2:)
In BASIC & machine language. CBM or ASCII printer. Up to 42 fields. Finds records from partial name plus backward or forward browsing. Unique key field data not needed. 1000 records of 127 characters per 4040 disk, 2800 on 8050. Saves label format. Includes report headers, column titles, arithmetic on data, & logical search for report data. Easy-to-follow 28 page manual. Worth its weight in gold.-Dr. George Piasecki

GENERAL LEDGER, $300 from C.M.S. Software. Version 2.5 operates on either BASIC 2.0 or 4.0. Requires 32k, dual disk & printer. Random access files give 1/2 sec. access by account #. Setting up account file is not hard, but requires planning. Once established, results are very professional hardcopy. Documentation a little light, but program is so turn-key, it doesn't need much. Osborn manual provided with program to aid in setup. Excellent audit trails & reports; match accountant files very closely. Only 1 disk need be copied to get full backup. In 1-1/2 yrs. of use, I've never broken out of the program nor lost a file due to a bad write. I highly recommend this program for any business.-Doug Dachenbach

EDUCATION REVIEWS

THE ATOM, $8 from Micro Ed. Requires 16k+ & 40 column screen. Fails to set graphics mode for business keyboard. Teaches basic concepts of subatomic particles. Has interesting graphics, & uses them in testing. Stop key not disabled, & test results not stored for teacher review. Variety of activities within program. Recommended for Jr. Hi. science use.-JS

GREAT TIMES HR, $8 from Micro Ed. Similar to GUZINTA HOTEL reviewed in M#3. Crashes on Basic 4.0, due to protection routine being overwritten by DOS variables on loading. Easily unprotected, but that isn't a teacher's task. Otherwise a very nice program, with good graphics & a puzzle that is fun to figure out, even for adults. Teaches multiplication of 2 or 3 small numbers together. For late elementary.-JS

MATRIC, $125 from Cognitive Products. For Matrix algebra & array processing. Machine language. Uses 5K in high memory. Adds 14+ matrix commands to Basic 3, tape or disk, (tested on DOS 1.0). 8-12+ times faster than Basic. I'm very impressed. Routines all work, are fast, easy to use, & greatly shorten Basic programs. Well-written manual, good examples & demo programs. Non-standard notation: 10 REM]CF=CF instread of 10 MAT CF=INV (CF), but not confusing. Output to screen or printer. No algebraic sign for determinant value, only absolute value, (only fault I could find). Enabling Toolkit ROM disables MATRIC routines. Price seems steep, but if you handle numeric arrays, or use matrix methods, & can afford it, this package is for you.-William L. Hinrichs.
NUMBOWL, $8 from Micro Ed. Crashes on Basic 4.0, just like GREAT TIMES above. Otherwise, teaches various ways to combine numeric factors to approach a desired arithmetic result. Gives total score, but no indication of whether score is optimum for the random numbers given, or even in general. Best used in group setting, with several students figuring out highest scoring solution before answer is entered. Late elementary.-JS

General comments on Educational software from Teaching Tools: Microcomputer Service -- $20 for 2 copies of each program on cassette. Less than 8k, compacted, somewhat protected BASIC programs. Should work with all ROM sets. Short manuals help teacher/parent assist students. Most screen displays needed instruction. Input routines ignore undesirable use of keys. Cute figures, words, or flashing for feedback. My usually reliable tape deck had much trouble loading 2 of the programs. Also, (foolish in educational setting), the record-lock tabs were still on the cassettes.-BA

ADDITION. Makes screen timed, electronic math sheet. Student chooses from 24 difficulty levels, 1 to 99 problems. Adult may preset this plus maximum time to do all problems, no. of tries before correct answer given, time before "Answer Please" displayed, & whether cute feedback pictures are used. Each problem is screened nicely. Screen input & pointers guide student to answer or show carry from right column to left. (May delete left to right.) Final report: average time for problems correct on first try. Excellent except screen, like manual, should say "Press (=) when ALL DONE with your answer."

SUBTRACTION. Same techniques as ADDITION above. Also excellent.

LETTERS & NUMBERS. Practice matching letters or numbers or complete ordered sequences of them. Screen displays large characters including upper/lower case. Choose: case of letters displayed, no. of characters per problem, 1 to 999 problem sets, & fixed or random location of a sequence's blank. Well-done & good options in many ways. But probably too complicated for the young or learning-disabled students who would use it.

MATCH GAME. Many variations on "Concentration" memory game (Turn over face-down "boxes," 2 at a time; try to make the most matches.) Students choose (or adult presets): large or small board (12 or 20 boxes); type of items to match (shapes, animal names, french-english words, math problems, or set your own); difficulty level (1-20); & 1-4 players (1 may play against PET). Students must be able to follow screen directions to proceed thru game. Excellent, enjoyable way to teach many facts.-BA

"FIRMWARE" REVIEWS

CALC, $100 from Matrix Software. For users of MAE or CBM assemblers. A much-enhanced equivalent of Sweet-16 on the Apple II. Allows PET users to pretend 6502 is a 16 bit chip while writing code. Unlike Sweet 16, you don't have to have CALC in ROM to run a CALC program. Capable of attaching its own run-time portion to programs, so any PET with same BASIC ROMs can use them. Consists of 4K ROM chip available at various addresses in memory, plus file of macros to assemble. Also includes debug feature that steps through finished programs to track errors. I've included a guest review by the editor of THE PAPER, which follows. Ralph's comments are similar to my own first impressions, & those of another prominent reviewer who also has it. Learning CALC is much like learning a new processor's op codes. The lengthy, & otherwise helpful, manual neglects to illustrate correct syntax for several commands with practical examples. I have so far failed even to get it to emulate a simple question & input statement. The debug mode hasn't been able to lead me to my error yet. If I knew for sure that a rumored full Microsoft compiler for PET Basic 4.0 will soon be available, I wouldn't give CALC another thought. However, I have yet to see the rumored British compiler for BASIC 3.0, & the 4.0 version was incomplete the last I heard. Those who need something higher level than an assembler, & faster running than BASIC, & need it right now may still need CALC.-JS

(REVIEW #2:)

"I have had some time to play with CALC. It really is a new language. The initial reaction of a novice programmer is that it is easier & CHEAPER to program in machine language or assembly without CALC. I am sure that this opinion is partly due to my own ignorance."-Ralph Bressler

PICCHIP, $75 from Skyles Electric Works. Graphics extension to BASIC. 4k ROM. Specify BASIC version. (Review copy in RAM for BASIC 2.0 obtained from Europe.) VERY capable graphics package. Provides fantastic animation of PET graphics characters with very high resolution, but only in 1 dimension at a time. BASIC

continues to work normally. Recommended for those who often need fast graphics.-JS

GAME REVIEWS

ATLANTIC PATROL, $7 from Programma. 8k. Very good sea battle simulation. Uses some graphics, but they just sit there. You control the British Fleet, trying to wipe out the German Fleet. You can choose 1 of 3 types of ships to command. If you're sunk 5 times, that's it.-JOH

CHECKER KING, $20 from Personal Software. 8k. Machine language. I've never been beaten by a computer checkers game...until now. It took three defeats at level 4 (of the 8 levels you can play) before I beat the computer at levels 5 thru 7. Tries to set up multiple jumps on you. Many options plus 3 built-in checkers problems to solve. This program is to checkers what Microchess (from Personal Soft.) is to chess for the PET. A good investment, but heavily protected.-JO

COMPUTER ACQUIRE, $15 from Avalon Hill. 16k. Machine language. The computer version of the Bookshelf game of the same name. Never played the board game before so can't make a comparison. 1-5 levels of play with 1-6 players, or you can play the computer or watch it play itself (handy for learning to play well). You place hotels randomly on a numbered board, try to build chains, buy stock in them, & try to have the controlling interest. You can beat level 1, but past 3 it's tough. Try out the program at your computer store if you can. I prefer graphics & sounds games compared to numbered board games.-JO

CONFLICT 2500, $15 from Avalon Hill. 16k. Space war game in which you try to stop the Planet Pulverizers from destroying the universe. Average game. Found 1 bug. Uses graphics, but they are slow, simple & confusing. Hard to play at first, but fun once you get the idea.-JOH

HELLFIRE WARRIOR, $25 from Automated Simulations. 32K. Best in the DUNJONQUEST series. Four new levels: 1) Lower Reaches of Apshai, 2) Labyrinth, 3) Vault of the Dead, 4) Plains of Hell. Many new treasures (some magical) are present, but they are guarded by many new monsters!-JOH

INVASION ORION, $25 from Automated Simulations. 16k. Another space war game. Many options & variable scenarios. Uses phasers, torpedoes, tractor beams, etc. Very good game, even with its simple graphics. Play time: 15 minutes to 3 hours. Good manual.-JOH

LORDS OF KARMA, $20 from Avalon Hill. 32k. Machine language. Adventure game with over 150 locations, an assortment of weapons, & a hoard of monsters. The object is to do good deeds, such as saving the princess, giving to a beggar, & slaying evil monsters. One of the best adventures I have seen for a PET.-JOH

PENTAGON, $15 from Harry Briley. 8K. One of several CLUE type games. Good example of what a good programmer can do. GOOD.-Eugene Smith

PYRAMID ADVENTURE, $14.95 from Aardwark Technical Services. 8K. Adventure type game. Fair to good. Challenging.-Eugene Smith

SPACE SHUTTLE, $10 from Programma. 8k. The object is to take supplies up to a space station. Uses good graphics, but is very hard to win.-JOH

TIME TREK, $15 from Personal Software. 8k. BASIC & machine language. Heavily protected. By far the best 8k star trek game for PET. 9 difficulty levels with stationary klingons or with moving klingons. All motion, information, action,

stays on-screen at all times. Good use of PET graphics for objects (ships, stars, bases) & shooting phasers & torpedoes. Uses all standard commands. Great game; I always like shooting the unknown '?'!-JO

VIGIL, $35 from ABACUS Software. Game language interpreter (4k), for 1/4 dot graphics on all 40 col. PETs, (specify). Not structured. Programs very hard to read, because VIGIL redefines Basic's keywords. Easy on/of for picture elements. Tests for screen edge. Supports user port & CB2 sound. Two timers, 26 registers (no named variables). Only tests are branch-if-true & branch-if-false. Big number display, 255 max. Easy disk & cassette save & load. Basic works except during a run. Sometimes "flaky", but this can be avoided. 9 demo games. Faster than Basic, but slower than machine language.-JP

David Conley, of 10571 Kerrigan Ct. Santee, CA 92071 is selling disk data files for several commercial game programs only sold on cassette, along with listings of changes needed in calling programs. Prices range from $4 for Automated Simulation's DATESTONES OF RYN to $12 for their STARFLEET ORION. I haven't seen these, but quite apart from likely copyright problems, They're only for beginners. Tape-to-disk copy utilities are widely available through user groups, & the file command changes needed in Automated Simulations programs are trivial -- 1 statement in DUNJONQUEST.-JS

HARDWARE REVIEWS

ANACOM 150 PRINTER, $1150 from Orange Micro. 9x9 dot matrix, logic-seeking, bidirectional, 132 columns, 200 characters/sec., 6 & 8 lines/inch. Front feed with adjustable tractors & quiet. I interfaced it with a standard Centronics cable from Virginia Micro [super guy at V.M.]-Douglas Dachenbach

CBM 4022 80 COLUMN PRINTER. $795 from Commodore. Replaces previous Commodore 2022 tractor printer. It features adjustable tractor only paper feed, intelligent IEEE 488 interface, & is packaged similar to the new Epson MX-70/80 printers. Uses 8-wire impact print head; bottom wire is used for descenders on appropriate letters, making very readable text font. Prints all normal PET graphics characters. Vertical spacing is adjustable via software to print continuous graphics. Supports 11 secondary addresses, used as follows: 0-normal printing, 1-print per previously defined format, 2-store formatting string, 3-set line per page, 4-enable printer diagnostics, 5-define programmable character, 6-set spacing between lines, 7-select upper or lower case, 8-select ASCII/graphics, 9-suppress diagnostic messages, 10-reset printer. Reverse field printing & enhanced (expanded width) characters also available.-Greg Johnson
(REVIEW #2):
The main points that upset me were: only prints unidirectionally(!) even though manual says it is bidirectional. Also, manual was next to impossible to decipher. It looked as if someone in Engineering sat down & deleted all references to Epson, then deleted a few random paragraphs & pages, & rebound it. I hope they are planning to rewrite it (& the 8010 modem manual), as I was just getting used to Commodore's documentaton. I consider this (& the modem manual) to be a step down.-Mike Kourie
(REVIEW #3):
Closest thing to a "scam" that I've been involved with in this industry...I'd call it a camauflaged MX-70. Unidirectional, 5X7 dot matrix, & only 1 linefeed option (all or none). You get automatic paging whether asked for or not. No question--the MX-80 is the best value to come along in printers.-John Malone
(REVIEW #4):
I've heard a bidirectional mod for the 4022 is coming, but I'd still say most users should get Epson's MX-80, or their new models announced at NCC, instead of the 4022.-JS

SOFTROM, $130 from BMB Compuscience. For all 1979 & later PETs. Like the "AdoptaROM" in M#3. Stands vertically in a ROM socket & plugs into memory expansion connector. Unlike its competitors, it can also have a ROM on board, selected with a switch added by the user. (No instructions, & you have to cross the wires to get this feature to work.) BMB sold dozens of these to eager buyers at the TPUG meetings in May. Recommended.-JS

(I also saw the competing INSTANT ROM while in Toronto. It is said to be like Soft-ROM except: 1) it's far smaller. 2) it has CMOS RAM plus a battery backup good for three months after PET is turned off. 3) It can't be paired with a real ROM. It costs about $162. I've since been told the unit uses 2 Hitachi chips that are pin-compatible with the 2716 ROM, so if you don't need the battery backup, you may just want to try using the bare chip.)-JS

TALLY 8024 PRINTER, $1800 from CBM. A nice, FAST dot-matrix printer. We have the 7x9 version, & have been very pleased with it. I consider it a must for business applications with a lot of in-house paper demands.-Mike Kouri
The programmable character may not work on the 8024, & I don't think it has PET graphics.-JS

VIC PERSONAL COMPUTER, $299 from Commodore. 5k memory (expandable to 32k), 22 column screen, 16 screen colors, 4 programmable function keys, 4 sound generators (3 music, 1 noise), full PET graphics, PET BASIC, accepts plug in Rom cartidges. This machine is Commodore's attempt to recapture the home computer market. With all of the features above for only $299, it has a good chance to do it. I saw some software (mostly games) at the NCC that Commodore plans to release, including VIC INVADERS, & it all looked good. Other companies are also considering or marketing VIC software; Creative Software already has a package out, & CURSOR is considering some form of VIC software. Limitations: 22 column screen, only 5k memory on board, & it runs very hot. Also, Commodore doesn't tell how to define a character set, but it CAN be done.-JOH

SWARM 100, $150 from Batteries Included. "It seems to operate OK. It just plugs into the ROM slots with no cables or wires. Room for BASIC 2.0 & BASIC 4.0 & 5 utility ROMs. 2 ROMs at $9000 & 2 at $A000 & 1 in the $B000 slot. A simple POKE chooses which utility ROMs are enabled. To switch BASIC 4.0 to BASIC 2.0, you can hang up the system with a POKE & then reset or use a simple ML program. With the program swap there is no loss of your BASIC program. I have not been able to go back to BASIC 4.0 without losing my program & am inquiring about this. I also took your suggestion about ZIF sockets for DOS swapping & this works fine."-Ralph Bressler

2040 ERROR LIGHT, $30 from BMB. I bought this little board that changes the red LED in the middle of a 2040 or 4040 front panel to a green/red one, with a built-in buzzer. Normally, this one is on & green, to show the disk has power. On error, it turns red, & the buzzer goes until you reset the disk off or read the error channel. Since the noise might get to you after a while, BMB partially muffled it on my copy. You can hear it, but not as loudly as on the ones I heard up there. Also, my drive is an old one, so I had some trouble fitting the little board in position & had to jury-rig a ground for it. But I sure like it all the same. Cost is $30, US or Canadian. Recommended.-JS

EXPANDAPET/EXPANDAMEM, $525 from Computhink. Add-on RAM for ancient PETs. Usually works perfectly, has 4 expansion slots with pinouts almost identical to Apple so Apple cards can plug right in--but not the DC Hayes moden card (DC Hayes requires -12v,not available on Expandapet, but not impossible to add, copying the +12v circuit with reversed polarities). But due to a design error in the refresh

circuitry (confirmed by the manufacturer), the memory loses data when continually addressed, as in a software wait loop. Basic programs are no problem, because the board refreshes itself itself adequately during the keyboard scan interrupts; but critical timing with interrupts inhibited cases trouble, so that Chamberlin music, software modem programs & such must not be placed in this memory. (In Nov '80, manufacturer promised to let me know if a fix were possible; haven't heard from him since.).-Charles A. McCarthy

UTILITIES REVIEWS

MONITORS. One more time on the difference between supermonitors: 1) SUPERMON, by Jim Butterfield, has the fewest commands, but is easiest for beginners, because it is self-relocating to high memory, & is supposedly able to list last 5 entered instructions when asked. 2) MICROMON is the newest version of EXTRAMON. It adds scrolling during assembly & hex dumps, & works on both BASIC 3 & 4. A new version "c", by F. Arthur Cochrane, available from ATUG, adds a 'K' (kill) command, binary display, plus a user-vector for later added commands. JS's new favorite.

CBM ASSEMBLER, release 2. $90, for Basic 3 or 4 with CBM Disk. All machine language & fast. Excellent assembler with terrible documentation. Includes an editor, assembler, & 3 loaders (for different areas of memory). Editor has auto number, break to monitor, change string, find, delete, format as assembler, kill, cold, resequence lines, get & put files, & cput (save file without spaces. Cold & cput are not mentioned in the manual). 2 pass assembler allows 6 character labels, & all standard directives & commands. Allows conditional assembly (also not mentioned). Disk includes SUPERMON, BASIC AID, & should have source files for the editor & the loaders. Make certain that these source files are included; they are not in some of the earlier disks. Source files use conditional assembly, & by reading them with the editor, you will see how that works. The source files have excellent documentation, & are much better than the manual for demonstrating the assembler directives.-Ron Blattel

FILEMASTER, $35 from Len Sasso. For 8032 & 4040 or 8050, specify. Protected. A VERY flexible & powerful disk utility, along the lines of the old DUM program, but light years beyond in power & speed. Sets up jobs in any of several ways, then proceeds to do them. Can easily & quickly copy any portion of a diskette to a new drive, & then immediately delete the original disk's copies. Directory includes scratched files. Able to restore a diskette with twenty or more scratched files in under 5 minutes, without any user intervention beyond hitting a few keys at the start. May even be used as a disk catalog. Usable even without instructions. Highly recommended.-JS

MACHINE LANGUAGE UTILITY-PAC 1.2R, $82 from PS or Competitive Software. Separate versions for BASIC 3 or BASIC 4. 4k ROM at $9000 or $A000. Includes an enhancement of Bill Seiler's EXTRAMON, called ULTRAMON. It adds a printer mode, hex/dec/ASCII conversions, logical operations, & a memory test. This part of the program is not as good as MICROMON, in my opinion. In addition to ULTRAMON, the ROM also includes the "Wedge", a screen print, "Un-new" & "Disk Append" from Compute! magazine, plus my own "Lower-case Lister" from Micro, under other names. I hope we authors are getting a royalty, but I have my doubts, as none of us are even mentioned in the 12 pages of instructions. Overall, typical of what is available for just a copying fee from user groups. I'm astounded that Compute reviewed it favorably at this price! Not recommended.-JS

ULTRAMON 1.4 is most of the same stuff, as UTILITY PAC above, in RAM, with less "borrowed" material, & selling for less. Still not recommended.-JS

RESOURCES

AARDVARK TECHNICAL SERVICES	2352 S. Commerce, Walled Lake MI 48088
A.B. COMPUTERS	252 Bethlehem Pike, Colmar PA 18915
ABACUS SOFTWARE	P.O. Box 7211, Grand Rapids MI 49510
ADDISON-WESLEY PUB. CO.	Reading MA
AUTOMATED SIMULATIONS	1988 Leghorn, Mountain View CA 94022
AVALON HILL	4517 Harford Rd., Baltimore MD 21214
BATTERIES INCLUDED	Toronto, ONT CAN
BLACKBURG SERIES	P.O. Box 87, Check VA 24072
BMB COMPUSCIENCE CANADA LTD.	363 Main St., Milton ONT CAN L9T 1P7
BYTE/MCGRAW-HILL	70 Main St., Petersborough NH 03458
CALIFORNIA SOFTWARE ASSOCIATES	...is no more. See SOFTWARE FROM SASSO instead
COGNITIVE PRODUCTS	P.O. Box 2592, Chapel Hill NC 27514
C.M.S. SOFTWARE	5115 Menefee Drive, Dallas TX 75277
COMMODORE CANADA	3370 Pharmacy Av., Agincourt ONT CAN M1W 2K4
COMMODORE USA	950 Rittenhouse Rd., Norristown PA 19401
COMPETITIVE SOFTWARE	21650 Maple Glen Dr., Edwardsburg MI 49112
COMPUTER MAIL ORDER	501 E. Third St., Williamsport PA 17701
DR. DALEY SOFTWARE	425 Grove Av., Berrien Springs MI 49103
EASTERN HOUSE SOFTWARE	3239 Linda Dr., Winston-Salem NC 27106
FANTASY GAMES SOFTWARE	P.O. Box 1683, Madison WI 53701
HARRY H. BRILEY	P.O. Box 2913, Livermore CA 94550
LONG ISLAND PET SOCIETY	c/o Ralph Bressler, 98 Emily Dr., Centereach NY 11720
MCGRAW-HILL	630 Bancroft Way, Berkeley CA 94710
MATRIX SOFTWARE	315 Marion Av., Big Rapids MI 49307
MICRO-ED, INC.	P.O. Box 24156, Minneapolis MN 55424
NORTHERN TECHNOLOGY BOOKS	P.O. Box 62, Evanston IL 60204
ORANGE MICRO	3150 E. La Palma, Suite 1, Anaheim CA 92806
PERSONAL SOFTWARE	1330 Bordeaux Dr., Sunnyvale CA 94086
PROGRAMMA INTERNATIONAL	6908 N. Naomi St., Burbank CA 91504
PS SOFTWARE	P.O. Box 966, Mishawaka IN 46544
SCELBI COMPUTER CONSULTING, INC.	20 Hurlbut St., Elmwood CT 06110
SKYLES ELECTRIC WORKS	231 E S. Whisman Rd., Mountain View CA 94041
SOFTWARE FROM SASSO	P.O. Box 969, Laguna Beach CA 92652
SYBEX	2020 Milvia St., Berkeley CA 94704
TEACHING TOOLS:MICROCOMP. SERV.,	P.O.Box 12679, Research Triangle Park NC 27709
VIRGINIA MICRO SYSTEMS	14415 Jefferson Davis Highway, Woodbridge, VA 22191

This Midnite is already a month late, 8 pages too long, & doesn't include all that we have on hand already. ARGH! CIPUG members assisting this time were: Brent Anderson (BA), John O'hare (JOH), Jim Oldfield (JO), Jeff Porter (JP), Ellen Strasma (ES), & Jim Strasma (JS)

USER RESPONSE

Now it's your turn. Help Midnite save PETdom with this response sheet. Anything you want in Issue 5 must reach us by September 1.

FIRST SOME PERSONAL DATA (ABBREVIATE WHEN POSSIBLE.)

Name: _____
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NEXT, IF YOU'D LIKE TO REVIEW SOFTWARE, YOUR AREA OF SPECIALTY

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