BULLETIN BOARD

Hello, members, and thanks for your almost unanimous response to the survey. There are still a few guys out in the cold, not getting this issue, but in general you are a vitally interested, fast-responding group.

If you are not a member, you will notice your application and survey inserted in this issue. We only give one free issue, so this is your time to decide.

Any new members find it necessary to have your $10 Master/Visa receipt back? I'll save them for a few weeks and send you yours if you fire me off a quick stamped envelope to use.

Some of you have noticed that Orphans does not support nine-digit zip codes. I went along with the increase to five, but now the post office is asking for too much. If you listed nine digits in your address, I trashed the other four. Even if our mail takes an extra day, we have to fight back sometime.

You girls, and we do have a minority of girls in this club, when the newsletter says guys we mean people, o.k.? If one of you computing ladies wants to write us a note about what it's like coping with a male-dominated field, we'll edit and run it in the newsletter.

Your surveys revealed a huge number of hardware bugs in what is still the finest all-purpose PC on the market. We are running a very big section on those bugs, with solutions for some of them and shoulder shrugs for others. As a result, the long software list offered to new members did not fit this issue, and will run next time. Your editor apologizes for your extra waiting.

PUMPING SILICON

IMPORTANT NOTE FOR MEMBERS: If we can just double our membership several times, we will have every 2000 owner and unbelievable power. Each one of you, if you think your membership is worth more than $10, pop over to your local Shacks and nearest Tandy user groups (listed in the back of Computer Shopper), and GET ONE NAME OF A 2000 OWNER! You'll be doubling your part of this club, and making an important friend at the same time. If you find a bored and friendly Shack salesman, you may score his whole list (half a dozen). Send the address(es) to us and we'll sign them up. Although it won't pay you fully for your labors, the Orphans will send you a $5 check for each signed-up member. Almost every owner who gets our offer accepts it, including offers forwarded to a second-hand buyer.

BIG ED'S GARAGE SALE

You've heard me crowing about the leverage we have with manufacturers of software and hardware, because we're so big.
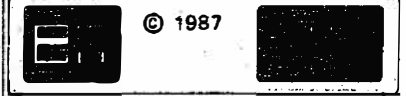
But we are also a small percentage of the desperate 2000 owners out there, because Tandy refuses to let them have our offer of membership (see the Ed Juge story in this issue).

Right now, we're lucky we're just a minor fraction of the 2000 owners, because I'm warning you that it is sellout time at Tandy. This month and next are virtually your last chance to get many pieces of hardware and software for your machine. It hurts me to say it, but even a Tandy retail store is an okay place to shop this month. Of course, call a few franchises first, using our latest list below.

The mouse, for instance, is extinct, although Tandy is cheerfully selling the mouse board for which buyers will find no mouse. Rumor has it that other breeds of mice

ignore our board. If your computer center guy has a mouse on the premises, buy it fast (buy two) for the $25 sale price and give him another $25 for lunch. If somebody has extra mice, notify Orphan HQ and we'll buy them all for the members that miss out.

The hard drive board, especially the later model (5127) with external D-drive outlets, is a particularly good buy for these final days of 2000 retailing, because, connected to an external 40 meg or cartridge drive, it would erase all advantages* that newer computers have over the 2000.(*Ignoring IBM compatibility, which IBM itself is ignoring these days.)

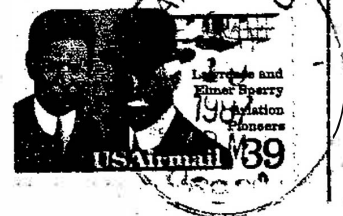## VM-1 FOR LAWNS, CM-1 FOR GARDENS

Many of you are holding out, particularly for the CM-1 color monitor. But the Fort Worth warehouse is already out of them. Buy one anywhere, today, if you'll ever want one. No other monitor on the market can do the job. There are still some color chips and graphics boards around; buy now if your score the CM-1. Word processing and number-displaying are unexciting in color, and more difficult to see and endure than on the green VM-1. But if you do or will do graphics, it's a whole new world in color.

The color monitor is on sale from April 10 through June 8 for $429, less at franchises, and a lot of goodies are reportedly in the May regular sale (this is written April 25).

The May sale is out now, and let me assure you from my experience, the first five items on page 5 are necessities for the coming long winter of the 2000. Also nice would be the tablet (last on page 4, their layout mistake), and the color monitor on page 5 if you can find it.

The old CGP-220, now also extinct, is blurry and pale, but our only printer for color, and any plotter can give exciting clarity to color lines after a half-hour wait. As for color + sharpness + speed, Orphans will try to check on the availability of printer drivers that will join our software with better color printers. No promises.

ORPHANS
387 MAIN ST.
WESTPORT, CT 06880

however, and a good try may fail. Grab the CGP if you find it for under $200.

Orphans haven't called around for price breaks this month, because it's a seller's market. If you find what you need at the lowest price you've heard, place your order at that moment! Chances are, it's your best price and last chance both.

The franchises add about 3% for charge cards, but use cards! Once your order is paid for (during the phone call), you've beaten out all the guys mailing in checks by at least a week. Franchises understandably take a week to clear checks.

JUNGLE TIPS FOR HUNTERS

Tandy's internal message for stores: Unload it or you'll eat it. Orphans' message to you: Screw or be screwed. Sale prices are often the best compromise, but bargain hard. Laugh out loud when a salesman claims that in-stock items were bought at the former cost, and so are not on sale. Mention a letter to Fort Worth if he sells to you retail, and write it! You could land a refund, and if you don't, nail the store in small-claims court. Mention that court to Fort Worth. As for going under sale prices, talk loudly (on a Saturday afternoon with moneyed victim types crowding the store) about them trying to sell any beat-up, dusty demo item for "new" price (sale price is for new, sealed merchandise). There are different caveat emptors for those calling franchises, below. [caveat=let him be wary; emptor =the buyer]

Our franchise (discounters') list is still trickling in-- check all your local phone books, under computers, for a SEPARATE Radio Shack listing under the list of regular stores, and send what you find to the Orphans today! Here's what we have so far, not checked yet so some may be ordinary stores or Tandy offices:

WHERE A DEAL IS A STEAL

Big D Computers, Roanoke Center, Roanoke TX 76262 [800-367-2443] *lic coming*

Champion Electronics, Claremore OK 74017

Computer Discount of America, 31 Marshall Hill Rd., West Milford NJ 07480 *201-728-7555 NOTHING*

Computer Plus, POBox 1094, 480 King St., Littleton MA 01460 *207-873-4099*

Dave's Radio Shack Computer Center, South Broadway, Pennsville Shopping Center, Pennsville NJ *609-*

Delker Electronics, #D-223, Smyrna TN 37167 [615-459-2636] *BILL WINDOW DRIVERS, ORDERED 1-29*

DFW Computer Center, 326 Main St., Grapevine TX 76051 [817-481-7253] *817-573-7283, 800-433-SALE*

Electronic Service, 820 E.Lincolnway, Minerva OH 44567 *216-868-4267 NOTHING*

STAN Fort Worth Computers, same address as National below [800-433-7283] *expansion RAM board: 5161 -130 + CH195, 5162 -90*

Freedom Electronics, 118 E. 6th St., Lexington, NE 68850 [800-222-9485] OPEN SATURDAYS.

A.J.Giaccio Co., 4625 N.5th St., Philadelphia PA

Marymac Industries, 22511 Katy Fwy., Katy (Houston) TX 77450 [800-231-3680] *Supercalc IV ordering*

National Computer Supply, 377 Plaza, Granbury TX 76048 [817-573-0220] *5161 -128, 5162 -90*

Nocona Electronics, Box 593, Nocona, TX 76255 [817-825-4027] *NOTHING 915-17-625-4161*

Perry Computers, 124 South Main St., Perry, MI 48872 [800-248-3823] OPEN SATURDAYS. *NOTHING AVAIL.*

Pioneer Electronics, 1683 Mount Hood Ave., Woodburn OR 97071

Pioneer Electronics, 10700 S.W. Ruben Lane, Sandy OR 97055 *503*

RS (=Radio Shack) Franchise, Lumberton Plaza, Lumberton NJ *609-267-5353 26-5141 2c#*

RS Associates Store, Eastview Mall, Victor

RS FRANCHISE BRICKTOWN N.J.
ART SULLIVAN 201-

(Rochester) NY *716*

RS A Tandy Corp. Co., Farmington Valley Mall, Simsbury (Hartford) CT 06070 *203*

RS Div. of Tandy Corp., 922 Main, Waltham MA *207-947-*

RS, A Div. of Tandy Corp., 365 Central Park Ave., *4189* Scarsdale NY 10583 [472-2520]

RS Computers, 2461 Flatbush Ave., Brooklyn NY [252-0402]

RS, A Div. of Tandy Corp., 1282 Broadway, Manhattan NY

RS Dealer, 418 Main St., Monroe CT 06468 [203-268-7000] *NOTHING, ADDRESS GIVEN*

Steven's Radio Shack, Phoenixville PA 19460 [215-933-3441] *NOTHING*

Vern Street Products, 126 W. Taft, SaPulpa OK 74066 [918-224-4260] *918-622-4895*

Woodstown Electronics, Woodstown NJ [1-800-257-5556] OPEN SATURDAYS. *NOTHING*

FIRST THING YOU DO, call all the 800 numbers and maybe the others, to locate in-stock hardware that you will be needing later on in your 2000 computing years. All these franchises buy from Tandy for the same cost, but some are closer to Texas (less shipping cost, even zero if they are driving distance from Fort Worth) and some are selling more volume (=less personnel cost per item). If you find things worth our knowing (extra low prices, any dirty tricks), write to Orphan headquarters.

Franchises traditionally charge no shipping, no state tax, and 3% for Master or Visa, but ask them to make sure. Software is usually 20% off, 10% during sales, but during the strangulation of the 2000 the sale software is 15% lower at the franchises. You will hear of 20% for strangulation software (Freedom, above), but they're charging UPS and maybe a 5% card fee, so it ends up being the same price.

Always ask about what's in stock, and call until you find it if it's hardware. If it's software, place a backorder but nag them twice a week or you'll never get it. After two weeks, backorder it from several franchises, and call the rest to cancel when your first parcel arrives. UPS is on dump and run now, so be prepared to avoid return postage by racing out to the truck and handing the amazed driver a refused package of software somebody else already sent you. *78-3552, NOTHING*

THE FIX IS IN, PLACE YOUR BET

Many of you said, in supplying your serial numbers when joining the Orphans, that your SN didn't have the "stick-on letter" before the serial number. That stick-on letter is an M, which stands for modified. It seems that there were so many bugs in the early 2000s that they rebuilt the whole computer, quietly, telling repair shops to sneak in the replacement parts on any repair job which lacked the "M" sticker.

Our digging has come up with a well-kept Tandy secret: All Tandy repair shops are under orders to do "all applicable mods" (modifications) at NO CHARGE until next September 30. "They don't get the little M's to stick on," a Tandy insider says about the repairmen, but they "scratch in" the M before the serial number.

The translation of this is that the motherboard, every add-on board, the power supply, every drive, every chunk of hardware in the fabulous 2000 has problems for which Tandy has worked out fixes, "mods." Even the 80186 processor chip, center of the system, has to be replaced if it is the old type. Many of these modifications will wipe out bugs you have noticed in the machine's behavior; some make the repairman's life easier later.

Tandy instructs servicemen to do the many modifications AT NO CHARGE whenever a machine is brought in for a repair. This includes realignment of the hard drive, because that's "Tandy's known boo-boo."

Tandy gives repair shops a credit for all this labor, even though the customer is not charged.

HIDDEN HELP

But service is also instructed, in a whisper, to do the "mods" on any machine brought in for mods only, at no charge! Both policies (free mods alone and free mods with any repair job) end September 30, 1987, after which you must pay the $65 service charge plus $35 or $40 for parts, for the same set of modifications that is free today.

Note that if you have other work done that's not on the mod list, like clean and align the floppies, you could end up paying the $65 flat-rate charge. So unless you want other important work done, specify that you're in for "all mods" only, they should skip advisable repairs, and say you expect an "NC" bill.

In either case, your machine will be tied up for two or three days on the service bench, plus the usual several days on the service shelf while heavy tippers and screamers get serviced. But where else can you get two days of free expert labor these days?

WHILE FLYING, LOOK FOR OTHER CONDORS

Don't be afraid that you will find a dozen Orphans waiting at the counter when you walk in. We are rare birds, and the average Tandy computer center has sold six 2000s in four years.

If you do see another 2000 owner, or hear of one from your repairman or your store, do ask for an address so we can offer them an Orphanage. Those orphaned owners are desperate.

There's another big secret about Tandy repair. They tell you on the phone that it's going to cost you $65 to carry your machine in the door ($85 for the minority with hard disks). That sounds like a dirty deal, except for the free "mods" mentioned above, but repair will often charge less if they find nothing they can fix.

AND--that $65 covers everything needed to make your machine work perfectly, "if it takes a minute or if it takes eight days." They are supposed to fix the problem you describe, plus all other problems they can track down with the two diagnostic disks--drive alignments, power supply aches and pains, motherboard maladies, troubles on all your other boards, plus "all applicable mods." Applicable means if you got it (any modded board or drive or part) they mod it.

If anything fails later or just isn't done, repairs or mods, you can get what you paid for by bringing the machine back for a free re-fix, and this time be a screamer to avoid shelf days and attempts to bill you.

You pay $65 or $85 for all labor on all problems they can locate, including the locating labor. If you question them just enough to make sure they do it all without totally aggravating them, you get a good deal for your $65. Parts are extra, of course, except for the "mods" parts, which are free until September 30.

Just in case you land a lazy repairman, peel off any "M" you find by your serial number before you take the machine in. If it leaves a mark, paste it back on. With no M, he can't send you away unchecked because he saw it.

One nice thing about the repair guys: they are paid a day's pay for a day's work, so they are normal--meaning they have nothing but loathing for the commission-dependent, computer-ignorant, here-today-gone-tomorrow salesmen out front who lie, lie, lie.

A NOTE IN YOUR MAILBOX

You will find that your initials are used in all newsletter communications aimed at you. It beats writing a lot of letters. Remember your initials, and look for them alphabetically in the giant message paragraphs.

Some of you registered with a nickname, but I am using your full name lifted off your check. Few people recognize their nickname initials, and I recognize almost nothing late at night. ── ME

Some of you share initials with other members: CH1, the total of your zip code digits is 27; CH2,19; DS1,11; DS2,16; JB1,9; JB2,23; JMS1,14; JMS2,17; JWS1,13; JWS2,24; JWS3,27; RS1,21; RS2,17; RS3,10

ACB	CT	DKS	DMZ	JAB	JR
SPN	LP	HP	HP	SP	SP
JWS2	JWS3	LAM	LDD	LEM	LLA
BP	HP	HP	LHP	BSP	NLHP
MB	MKB	MPB	PKG	RWM	REV
HP	NHP	HP	SP	SPN	SLP
RS3	SH	WTB			
LHP	FP-YOUR $10 IS PAID	BP			

B: You can't join this club with a BOX number.

S: You didn't fill out your SURVEY. You don't have to share software, unless you so indicate by naming loan prices, but you do have to tell us your hardware, software, and any questions or answers you have.

P: Until you fulfill membership requirements, you get no member PRIVILEGES. You do get the newsletters.

N: You gave no (or a wrong) serial NUMBER. You're not even getting this issue in the regular mailing, but when you finally get it, note the other messages that are included with your N.

L: You left software blank. You don't have to share it, but you have to LIST what you have.

H: You left HARDWARE blank, or obviously incomplete. You must list each box, board or device you have with your 2000, including your 2000(s) with internal drives noted.

F: This is your FIRST newsletter. You will find a survey enclosed which must be completely filled out for you to get the various member privileges. The serial number is so essential that without it you will not even get future newsletters. 6 participators (W)

YOU GIVE, YOU GET: JUSTICE HERE AND NOW

Many of you think that by sitting back and sending in no knowledge, needed patches, Tandy gossip, and so on, you're getting a good deal for your ten bucks. You're absolutely right.

Trouble is, I'm keeping a data base of helpfulness, and when I get goodies to distribute, cheap or often free, I plug in the helpfulness index when there isn't enough for everybody. You've got an even better deal waiting for you if you participate. Do you blow $20 a month on phone calls to keep your 'puter equipped and useful? If so, please send the Orphans the facts and frustrations you're getting from companies, and thus we'll all be helping eachother with thousands of dollars' worth of information in every issue. You must admit, you owe more than ten bucks a year for an advantage like that.

And if you remember your scouting moments, you can get quite a glow on from helping some baggy old lady cross the street.

NO BABY PICTURES, NO GOSSIP

Some new members have requested back copies, but they notice they're not getting them. For one thing, we are growing geometrically, and it's a pain for hundreds of people to ask for an issue that only dozens got. Reason two is that we're a fairly exclusive club. Some people hear from us and don't respond, and then join when they realize that no dollars gets them no more free issues. In this club, you get no more than what you pay for, and not retroactively. Reason three: Our first issues were little friendly things, Hi George how's the new house, that sort of thing. I would be embarrassed to mail those little chats to all 50 states, and on this issue we're going worldwide. (If you think you're lonely, how do you think it feels to own a 2000 in Tanganyika?) But the best reason of all is that the early issues didn't contain any hints of value because I was so disorganized. They were all pep talk, let's stand up and fight for our support, warmth without illumination.

One member expresses regret that this is a secret society. But think of it this way: The more people hear about this being the only way to contact a crowd of 2000 owners, the more people will join, and thus our power for mutual help and our leverage with manufacturers will increase proportionately.

BIG ED HAS A SECRET AND YOU'RE IT

We went to the mountain this month, since the mountain has not come to us. Calling Ed Juge, we pried from him, in writing and in his down-home country-boy conversation, these bits:

❈

HE will never give or lend or sell or show us his Tandy 2000 owners list, which fits on three floppies, because he doesn't want the dear lambs to be bothered by mail offering them support. He won't sticker a mailing for us, even keeping the names secret. He won't let Tandy dealers have the address of the Orphans so that they could, while stalling desperate 2000 owners seeking support, give it to the owners. He refuses to mail the 2000 owners a list of known and solved bugs which would be compiled by the Orphans. He won't tell desperate 2000 owners who call Tandy in Fort Worth that a user group is available. He won't do it for people who write Fort Worth.

❈

The translation of all those refusals is that he wants the desperate 2000 owners to give up on and junk their machines, just to lasso the 10% of them asinine enough to trust Tandy with another two thousand computer bucks plus hardware and software tie-ins.

Some might suggest that since Juge runs marketing, I should have tried customer support. I did, and they said they weren't allowed to talk to me, I had to call Ed Juge because Big Ed is in charge of user groups. Is that like putting Eichmann in charge of the Jews?

Now I ask you. Would you want to buy another computer from this man? One member puts it this way: "I'd happily dance on Tandy's grave." Another member: "I'll never buy another Tandy product as long as I live, not after what they did to me with the 2000." He added that I could quote him and I did, but we don't use member names so I left that part out. According to him, his Tandy regional manager told him, basically, we got your money and you got a machine, now live with it.

Reports are pouring in that Tandy cash registers, when a computer is paid for, momentarily flash the letters "FY" after the dollar amount.

Tandy gives you as much support as you get for a cardboard clone you buy from a car trunk with the car running; but the Tandy price is a lot different. You were willing to pay that difference because of the common consumer fantasy that, because an exceptionally low price guarantees no service, that proves that an exceptionally high price guarantees great service. It doesn't. You have been outsmarted by a marketing expert.

WE'VE GOT THEIR NUMBER

Commentators on the computer industry, and even Shack salesmen, have been trying for years to guess how many 2000s Tandy was selling. Tandy has dazzled the industry by waving numbers in the high hundred-thousands, mentioning in the same breath that the 2000 is their flagship machine.

But people knew something was wrong. The price of the 2000 has been creeping down from $4000 to $600 in steady steps, and that had to mean some egg on Tandy's face.

Now, thanks to our member surveys, you are able to read here the scoop that all the Bytes and PCWorlds couldn't dig out: Tandy warehoused only 36,000 double-floppy 2000s, and only 10,000 hard-drive 2000s, a total of 46,000 machines.

The disaster is even worse than the figures show. Apparently that figure includes 8,000 machines they forced their stores to buy as store accounting devices. So Tandy offered for sale about 38,000 machines, and our spies say 5,000 double-floppies are still in Fort Worth in the back of the warehouse.

Tandy embarrasses easily, as the major company in a Fort Worth that is deeply ashamed of not being Dallas. Therefore they won't reduce the price of their dying 2000 any farther. Late one night this summer, when Texans get crazy with the non-stop heat, they're going to hire two 30-yard dump trucks and take five trips to an unselected landfill in north central Texas or neighboring Oklahoma, for a burial which our spies will be watching. We're going to wait a decent interval and then dig them all up, renting the same trucks. But we'll need about a hundred strong men for an all-night job. Any volunteers?

Here's the bottom line: Tandy sold only 33,000 units of the 2000.

REACH OUT AND TOUCH NO ONE

You know the story. You try to make an innocent little long-distance phone call, and an hour later you are wondering whether dynamite travels well in a car trunk.

MicroPro was dragging its feet on getting us a patch for the WordStar4 thesaurus, so I tapped eleven buttons on the phone. No busy line, a nice lady answered right away. I asked for the honcho in development by name, and she said "Please hold."

To summarize, she said "please hold" six times, and on the first five I got no one. I waited up to five minutes, burning 40 cents of your membership fees every minute. And on the first three of those long waits, I was disconnected without hearing another sound.

On call number four I said NO loudly a millisecond after the D in her "hold." I know a millisecond: it's the two clicks on the 1/1000 setting on my camera. She still put me on hold and I hung up. On my fifth call I bellowed NO after her "please," and she didn't say "hold." But her hold switch is silent and I heard nothing else. After five seconds I said, "Are you still there?" Another five seconds, and she said yes. I explained the situation, my needs, my money, my exasperation. She gave enough short responses to ring up an I.Q. in the low double digits, and then put me back on forever hold.

On the sixth call I did my number. I only do it about once a year, when people deserve it. "Good morning, Micro--" "Hold it, lady. I've been listening to you for half an hour, and it's my turn to talk. Get your hand away from that hold button. I want a human being, even if it's you, to listen to these words. I want to talk to Helen Sellers, and in the short time before I talk to her, I want to be continuously talking to you. No! Get your hand away from that hold button. You hear me? (A grunt) Now there's only one way you can get word to your helpers there that you've got trouble on the phone, and that's sending a messenger to Miss Sellers, or to one of your executives. Don't touch that button! Now, without touching your switches, do you think you can handle that job?" And then the damn lady put me on hold. Only a couple of minutes later, Miss Sellers came on the line and took my request about the patch.

As I was saying goodbye, I mentioned that I found their phone system less than satisfactory and would be reviewing it for our newsletter. Two MicroPro executives called me that day and told me how much they admired my work and regretted any inconvenience. I told them the review runs.

Calling MicroLytics, which is writing that patch for MicroPro, I mentioned my phone troubles. "Their phone system is bizarre," said a gentleman I won't name.
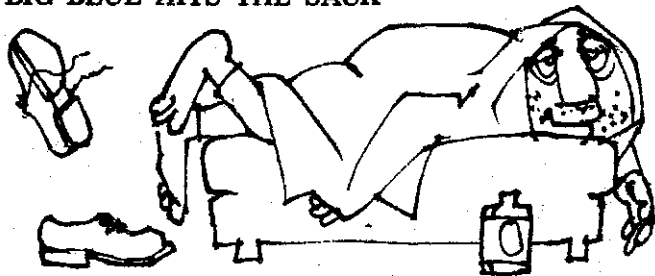
HOLD EVERYTHING

The hardware enhancements keep coming: more memory (but Envision offers a lot for the 2000) and bigger hard disks (but hard disks are a doomed technology).

There is, however, a second reason for buying the AT clones. That reason is software compatibility, because the 2000 software, although nice,is monopoly-priced. But wait--the Orphans can help you with that problem by letting you try software, buying only what you need most, no expensive mistakes, at franchise discounts.

A third problem we face is that improvements, like DOS 3 or thesauruses, are not made in 2000 versions. We might just have to live with that, to save thousands of dollars in machine rollover costs, but we have some talented members, and we have some market power when we deal as a group. We might just get those 2000 versions.

BIG BLUE HITS THE SACK

Like the bedtime drunk in the rooming house, IBM has finally dropped the other shoe. My view: it has completed the loss of its leadership by pulling in all directions, with substandard merchandise. The clock speeds they boast about are in the ten to twenty range, but down the street an unknown company called Datavue (data who?) is selling a PC with a clock speed of 150, yes, 150.

Jumping on its horse and riding off in all directions, IBM comes out with not one but four computers, mere copies of its own line upgraded to today's memory and hard drive sizes, with the obligatory token 386, tomorrow's leader but today's helpless baby. Nastily jumping to three-inch disks and rewiring the guts, merely to screw the clones, they announce they're dumping the whole PC+XT+AT line, giving rise to this double speculation:

One, how soon do they dump the new group? Why buy passage on a steamship line that keeps sinking ships with all aboard? This concept should not be difficult for Tandy 2000 owners to grasp.

Two, since the clone market now sells by far the most machines at by far the lowest price per feature of all market segments, will the clone market now seize dominance from IBM by being the best deal? The classier clones have been putting the versatile PC/XT/AT architecture in 286 and 386 machines, while IBM was sitting on its laurels and hands. Why should the market leap to IBM's panicky clonebuster, which it can't even deliver for many months, when good market sense says the latest IBMs were born to die young? Like kleenex, coke and zerox, the Charlie Chaplin models may become "ibm," the newest generic standard from a pushy company that can no longer push the market around.

The minidisk move is faulty. Without saving significant space, a company buying from IBM now faces information theft on a grand scale by employees who, free from the guilt trip of a 5-inch-disk in the shirt front, can claim the 3-inch disk got in the shirt pocket by mistake. This thought should help doom the new IBM line before the stealing gets up to full speed.

Impending size standardization also weakens the case for minidisks. The megabyte floppy, the gigabyte-capable audio laser disk, and the 10-meg cartridge (just a floppy in a box) are all the same five-inch size. Even personal judgment, by managers who have prospered through "happy mediums," favors a five-inch standard, when we see eight-inch and three-inch systems dying all over from clone fever.

All this still doesn't make us a clone, but we're less of an outcast when being orphaned becomes fashionable.

SUNRISE OF THE GIGAFLOPPY

Our dear machine is receiving another favor from the chaotic market: While the hardware people squeal about their fatter RAMs and their faster chips, we hear very little boasting about the 40- and 60-meg hard disks in the new machines. Why? Because hard disks are a doomed technology.

It does not make sense to buy any computer now, because the little five-inch disk we're all so fond of may hold a gigabyte next year, by getting shiny and being raped by an on-board laser. Why boast of 40 megabytes for $1000, that you can drag to safety in only an hour, when you will soon buy a shimmering floppy with 1000 megabytes for just five dollars, and change it in five seconds? If you want a copy, it's available at, check this, one megabyte per second, a billion bytes during coffee break if you have the obligatory double-gigafloppy machine. Gone are the days when "backup" meant backache.

And don't expect a lot of pushing for denser storage after that: On gigafloppies, you can fit every word ever written by every person who ever lived in a ten-foot-square room on the walls, with room in the middle for two couches and a bull session. That includes the grocery list you made yesterday, and the letter of resignation you tore up.

With that kind of change coming next year, who needs a new computer this year? Curl up with a good 2000, and wait.

HARD TIMES IN HARDWARE

Back in reality land, disk drives misbehave for some members. REM has a B drive that just quits, sending out read or write error messages like "Stuff it Charlie, it's too dark to read in here." This symptom means disk

misalignment, but cleanliness is next to alignedness.

Buy one of those coffee filters pretending to be a floppy ("cleaning diskette") and dampen the fabric visible in the slot with alcohol, either isopropyl (drug store) denatured (drug or paint store), or pure grain (liquor store). Stick it in and run a dir or chkdsk. Your 2000 will scrub its heads for five seconds before telling you the disk is a phony. Do it twice.

When you are really up a tree with a double floppy, move the stubborn disk and tap your prompt to the other drive, which will often cooperate long enough to rescue you. When that fails, after alignment, you can save the original disk by plugging in a utility disk to search it.

When the cleaning doesn't make your bad drive behave, it's realignment time, but see our shop section in this issue for hints that will make you happier about going to Shack repair.

LEMON AID

Some 2000s were just born to fail. EB has had his motherboard replaced three times. One such fix is common, in that wild six-layer solder sandwich, but three fixes means the problem is not solder cracks in the logic, but something the technician is not finding.

Our sources inside Tandy tell us that there are so few 2000s out there, working so well for so many people who often do their own fixes and patches, with problems so unique and surprising, that the usual Tandy repairman is lost inside our box. Documentation is often not read, because reading books on the bench is unprofitable.

MDL says his B drive won't work for the first ten minutes after booting. Swap the disks, physically, to see if the problem is on the motherboard or in the drive mechanism. While swapping, swap the power cords to see if it is a power supply problem. In the words of a Tandy insider: "There's always a power supply problem, unless it's been modified, to increase the voltage reliability and decrease the noise." (That's electronic, not audible noise.)

Getting these modifications and others is discussed in this issue.

WEDLOCK WITHOUT A KEY

Marriages are never happy, any more than laughing hyenas are really amused, but you can have a working marriage with 90% of the available candidates. Some couples, however, will never live in harmony and the same is true with software and our hardware. And you can't expect much help from the two manufacturers involved in such a problem, unless they are pressured by a big user group. AND Orphans won't pressure them unless 10% or more of you guys have the problem. Here are some under-10% problems, and good luck.

All such incompatibilities are correctable through software patches, and almost none of them are worth the trouble, unless the Orphans can simply send you the patch for $5.

EB reports that Open access, attractive for its 3-D graphics on the mono screen, refuses to print (even mono) without color chips. We do not have a patch for the Open Access printing problem or for any others reported in this section.

BPB says that on his bulletin board, the computer totally crashes every two weeks, requiring a cold (red switch) or warm (black switch) reboot. He's had the motherboard and even the 80186 replaced, plus all the upgrades discussed in this issue. One possible solution: There have been several serial-port "tech tips" sent to all service centers, which the bench guys never read because so few customers have modems. Modem owners often do their own fixes, leaving repairmen underexperienced. Seems there are both problems and

fixes available to the serviceman who riffles through the old tech tip file. Ask the repairman to either search the file himself or let you search it right then and there.

PRAY OR PAY

A Tandy source says that Tandy "software support," a separate entity within Tandy Fort Worth, will tackle all problems between Tandy's 2000 and software. They refuse to consider software unless Tandy sold it. Would it make sense to provide this support as part of the guarantees? "Sure," said our source with a chuckle in his voice, but the charge is about $40 an hour with lesser charges for extra hours. You've got all the support you can pay for, maybe.

You're certainly welcome to call software support, which you can find by asking any computer center or repair center for "the ATSO number," a long distance number within a hundred miles or so, where you don't spend half an hour on expensive "hold" as you do when you call Texas. ATSO stands for area training and support organization. The Tandyman you ask will glare at you, refuse, ask you to explain, and generally show personality problems, but this is because Tandy's pay scale guarantees his ignorance, and Tandy's policy is to pee on computer owners so they won't be in the way during computer sales. Be persistent.

As for the guys in the various ATSOs, I've never heard boo about them, so tell the Orphans what you observe about them.

MOTHERS-IN-LAW, HANGNAILS, AND PRINTERS

Multimate 3.3 causes printer problems for GL, although 3.2 didn't. Unless another member can help (write headquarters), no free help is available.

Several members are getting double carriage returns from some printers, not from others, on certain software; it's most infuriating during a graphics dump. Our technical lab* offers this: try the dip switches--that's only 2 to the 12th, 4000 identical test runs, shouldn't take you more than a year of continuous, fast, accurate work. Also, "Turn on the computer, go into basic, and LPRINT, to the fired-up printer, the character string that tells the printer to use only a single carriage return. Then exit basic and go into your software for a try. The printer manual or a basic manual may provide the proper character string."

(*Only kidding about our lab building. Orphan headquarters is merely I, and our lab is a six-inch clearing on my desk, when I can find it.)

SCRIBBLE WHEN YOU DIDDLE

In this and ALL attempts to break through a software bug, write down your keystrokes immediately when they achieve any success! It is horribly frustrating to strike the lost chord and never find it again.
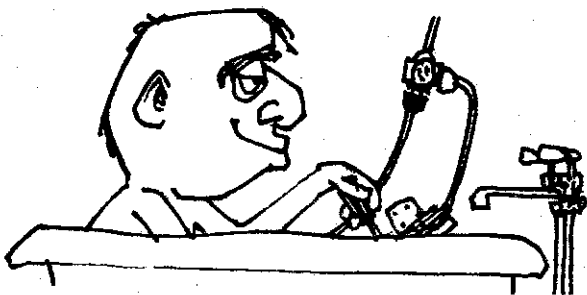
Where in memory does the 2000 store the number which represents the amount of RAM in the system? At what address in what memory? Our technical staff struck out there, but they nailed the next one:

A member's dual-floppy keeps dying and rebooting for the first fifteen minutes. "Hey," Hacker One interrupted. "Tell him to swing by repair to have his power supply modified. Hah. I knew that one." The power supplies are a known Tandy error, subject to free modification. And they are an exchangeable item, giving them a very good parts price.

Hacker One adds that the problem comes from the noise (techtalk for static messing up a pure "tone" going through a wire) and the voltage levels. There are two pots (potentiometers, little turnbuttons like a volume control that vary a resistance) on the power supply box, if you go

in there. You put a meter on the 12 volt and 5 volt lines, and just adjust the pots until the working voltages are on the button. If you don't find the two pots, it's already a modified power supply, with hard resistors instead.

All the baby books tell you danger, high voltage, but what the hell, go ahead. Do it in the bathtub so you'll be comfortable, and make sure your will is up-to-date.

JDS says his 8087 is having fights with both his hard controller and his Envision 640, in packages like Framework and Lightning. It's not hard to predict this, since all three devices are juvenile delinquents, but our technicians have no suggestion beyond the free Tandy modifications available. JDS finds that the 8087-640 fight ceases when he partitions system RAM down to 768K. Also, his power supply simply crashes after it gets a year old. Likely: they installed an unmodified version for the replacement(s).

TICK WELL UM ER AH TOCK

JDS has a mouse/clock that keeps erratic time. Our technical staff suggests cracked solder joints, which are often the key with any bug that bites only when there is movement like a diskette door snapping. At $25, we should all have an extra clock board, but see our mouse problem in this issue. The extra board is far cheaper than a long search for a crack. BUT my own opinion is that mouseboards ALL keep erratic time after their first battery change. To prevent this "loose clip error," see our mouse battery section herein.

MAB has two word processors (WS and WP) plus two printers (NEC3530 and a dotter). B works on C and D, A works on D, but A crashes on C. Again, try dips and LPRINTs, but it could be too rocky a marriage to struggle with. A printer demands certain signals from the computer; a program wants certain signals from the printer.

Symphony crashes in communications mode? Don't expect any help from either mommy or daddy on this one, RLC, but mommy (Lotus) is the best bet. JSBS had the same experience with PCTalk in COM, and he gets the same answer, unless members can help.

DESKTOP LANGUISHING

BLP has a DMP-430 that eats ribbons, but never gets hungry in the shop. Hacker Two says that if the paper is just a shade too thick or thin, it could throw the printhead out of rhythm so it doesn't back far enough away from the ribbon between strikes, so the moving ribbon catches. Try changing paper thickness.

JMS1 can't even get trouble from his 2100P when he tries its high resolution mode on 123. It sits there. As elsewhere, the printer service manual is always available with the serial number and the MS code, in this case MS-

260-1274. It could be a bad marriage, or just dip and LPRINT settings.

JSBS has a similar problem with the 2100P, printing blank lines into Windows Paint graphic dumps. Again, dips or LPRINTs can help, but he has figured out that loading the picture into a Windows document makes it print correctly. This is the ideal way to treat nasty software: trick it. More Windows problems, it crashes floppies when used with a RAMdisk.

HIGHWAY POWER, CITY DRIVING

The Envision boards that many of you have, giving you 896K to play with, may explain the problem to some of you. Try limiting system RAM to 640 or 768, the rest in RAMdisk. Try leaving vdisk out of autoexec.bat, and in problems with non-graphic (text) software, try booting with a copy of your original DOS 2.11.02, without the Envision patch on IO.SYS. If any of this diddling works, install the lucky files to boot on the same working disk with the offending software. If you get a reply from Envision about your problem, please share your results with the Orphans.

JEH and JSBS need printer drivers that Tandy erased from the IBM versions of SuperCalc3, 123, WStar, WPerfect. Hacker One says the 2000 "was made to be sorta compatible," so ROM printer calls can generally be expected to be interchangeable. Who among you can send these drivers to headquarters? We would like to query software manufacturers, but we're so slow here at headquarters!

Framework users, another short cut for you. "Extended select" insists you wrap up your package with a "return" press before you move-copy-delete it. Extended select is lying--you just skip the return press and press your function key. The right process happens anyway. This newsletter would never happen without framework, an indispensable program for the writing of complicated articles.

TANDY DOES WINDOWS, WITH ROCKS

You have stopped believing Tandy supports the 2000, but has it occurred to you they may be purposely crippling it? Here is your proof:

A new member asks whether the IBM-style version of Windows will run on the 2000 if he uses the Tandy patch disk (#700-2611). Absolutely. In fact, there is no Tandy version of Windows, they just sell the clone-compatible version plus their patch.

Now here is the dirty trick of the month: The Tandy patch is sabotage. Never let it touch your original Windows disk; use a copy. Tandy has finally revealed for us all to see the trick it plays on us with Tandy 2000 "versions" of software. Its supposedly helpful patching disk gets in there and erases ten popular printer families while it is adding two Tandy printer drivers. By the time our beloved manufacturer gets through mangling Windows, the once-full utility disk has 123,904 bytes free, and you have been stripped of drivers for Epson, NEC, Laserjet, Okidata, Itoh, TI850, LQ1500, Toshiba, NECP2, and SG10. Of course you should copy those ten drivers from your ORIGINAL Windows #3 utilities disk as soon as you have finished running the Tandy patch.

And never turn your back on Tandy.

SOMETHING BIG, SOMETHING HARD

Adding an external hard drive of any brand is just a plug-in if you have the later Tandy hardboard with three output buses on the backplate. Tandy and many others sell a generic hard drive cable set that carries control signals and data signals between hardboard and

external drive, using the two blue buses. Nobody knows what Tandy intended to do with the mysterious black bus to nowhere, but they didn't follow through. Anyone can try a use. It is an 8-bit control-and-data outlet, with I/O addresses 380 through 3FF hex.

The external hard drive is called as drive D: from this card, unless you have the Tandy store machine they used in 1985-6 for their retail accounting, which thinks its internal drive is D: and any external drive must be C:.

If you have the blank backplate of the 2000HD, with no output buses for external hard drives, you can still cope. All the terminals are there inside, ready for connectors which you can order from most big connector companies (sorry, we don't have numbers). To tie them in, you need to drain off your body static, gently de-rivet the backplate, drill and saw out the oblong holes, reassemble, and hook up the connectors with a teeny-tiny soldering gun. If a plug-in chip is nearby, move it to safety during the cooking.

And see if Tandy stocks that drawer face of the external controller with the holes already in it, as a part number. Asking Tandy this sort of question, even through a dealer, takes hours, so I leave that chore to someone who needs the answer. If they do sell it separately, please write us at once! We have a pile of guys with the HD machine who would love to hook up a giant external hard drive.

PERSONAL PUTER HYGEINE

Here's a hint from Hacker Three, our expert in doing things easier: Ignore all that garbage in the manuals about taking all floppies out of the machine before turning it off and on. If such switching ever damaged a disk, he has not heard of it, but he says it may have occurred in the 70's on the veryearliest PC's.

However, be obsessively careful to save and quit (the quit sequence asks you if you've saved) every time you stop working in commercial software. Be aware that you forget this step most often when you need it most, after a long, tiring work session that you can destroy with one keystroke.

Do you damage a floppy by snapping open the disk latch to stop a writing process you don't know how to stop from the keyboard? Definitely yes, and you endanger the drive itself.

Many mysteries about our hardware, even individual boards, may be covered in the service manuals. Surprisingly, you can order (if your favorite salesman gets pushy on a warehouse call) a repair manual for any Tandy hardware item by taking the last four numbers of its catalog number (such as 5127 for the hard controller that has outlets) and preceding it with this form: MS-260- The repair manuals have tips on operating that would be in the owner's manuals if Tandy didn't hate you.

A DOCTOR BAG FOR PATIENTS

One intriguing oasis on our desert horizon is a pair of disks called the Tandy 2000 Diagnostic Disk, and the Tandy 2000 Alignment Disk, for sale to those who ask persistently at $165 the diagnostic, $109 the aligner, always cheaper at franchises. The big question right now is whether the extensive documentation (about 70 typewriter-size pages for the diagnostic) is supplied with the disks (which are also menu-driven). A smaller question is whether Tandy will start refusing to sell these disks when our demand picks up.

I've used the disk, sent in by a member, and it's pleasant to watch it work. Much of its English is Greek to me, but many members know every word. The full series of tests can take hours of machine time, but a quick checkup takes five minutes. More on this disk later, but write a note to HQ if you're interested!

FLASH: The catalog part number of the legendary diagnostic disk is AXX-2042, listed as a part under major item 26-5103, which is the double-floppy computer. The alignment disk, for fixing floppy drives, is AXX-2041, also under 26-5103.

THE WORD IS IN ON WORD

The problem with Word versus color is solved. Of course it's dumb to strain your eyes doing Word on the color monitor, but it was refusing to run on mono for those with color hooked up. No longer. My suggestion that a trace 1 switch was indicated has been echoed by several members, confirmed by Shack service, and tried successfully by your leader.

The wire called trace 1, which you are directed to cut in the installation instructions for the color chips, carries a single data bit at very low voltage, once in a while, if it's cut. Connected, it's a ground wire. Neither connecting nor disconnecting that trace can do any harm to computer or monitors, and the switching will enable MS Word users to proceed with business as usual after the color chips are installed. So far, trace 1 seems to have no effect on any other program, color or mono, graphics or text, whether switched on or off. Tell us if you find another.

The switch of choice is a subminiature SPST toggle in a Radio Shack bagpack, from the back-of-store racks that were all of the original Boston Radio Shack.

Before you unscrew the board, or even unpack it if it's still boxed, dress in animals and vegetables (wool and cotton) and touch heavy metal (as small as a spoon, as big as a 747) with both hands.

You drill a 3/16 hole in the backplate, mount the switch, and solder the four wire connections, very delicately. The best drilling spot should be an eighth of an inch above the G in "HIGH RESOLUTION," but check it out, watching the shoulder inside the card cage.

BE GENTLE! Circuits on this board are so small that germs wear glasses to see them. Tap an awl-dent gently against a hard backing like an anvil or the end of a fat bolt. Before you drill, wrap the other side with loose, gummy tape so metal flakes won't sneak into the board circuits. A vise helps. You'll have to stretch and deburr the hole with some little tool like a tapering nailsetter. Solder the joints (after cutting trace 1) with terrified care.

One big hint for many of you: Given the tips on getting service right now, elsewhere in this issue, you would be very wise to offer the serviceman ten dollars (folded money in advance) to switch your trace during the special servicing. Give him the tiny switch bag with the money; don't make him go chasing for one.

THE HOLY GRILLE

RW dreams of an external card cage, so you can slide in more than the four-board limit of the 2000. So does JB2. Quite possible, says one expert. You buy "a bread board at Hatry" and the connectors, one to mate with the motherboard and looking just like the front sockets in all the 2000 boards; another connector will lead to a giant ribbon cable (or two), which plug in at the external box.

On this breadboard, which itself takes up a slot on the 2000, you install "buffers" to keep all the signal voltages at TLL (transistor logic level). Buffers are amplifiers of a sort. At the external box, "pull-up resistors" adjust those signals to the specified voltages. The wires in the ribbon cables are too thin for power—data signals yes, but not the juice that operates the boards. Therefore, a larger multiconductor wire is needed with the ribbon cable, carrying 12, 5 and -12 volts.

MAY 87

The card cage itself will look like the 2000 motherboard when you peek in the back--a row of multi-pin male connectors pasted on the wall, with the bare tracks that look like an oven grille rack. If you have a little shop, do one and make it work. Then see how cheaply you can assemble the second one (including $10 an hour for working among friends). Double that price and offer it in the newsletter. Ads are free for members.

RW and JB2 also mention another common goal of members, and our technical panel considered it this month. Can a card cage be constructed that will take IBM boards (physically, that's easy) and functionally work with the 2000? Certainly yes, came back the answer, with logic wire, solder, and superhuman patience--so much of all of them, in fact, that the effort would not have a chance of being worth it to developer or purchaser. The idea won't fly, regrettably. 2000 cage yes, IBM cage no. IBM compatibility may be high on our wish list, but we shall have no holy grille.

SPECS TECH

I'll bet you thought specs tech meant specifications, technical--but it means the spectacles technique. If you are over 40 and not nearsighted, you notice that things up close have gotten blurry. You have probably tried half-glasses, which permit you to see both books (looking low) and people (looking high).

But half glasses will give you a stiff neck and inefficiency while computing. You need full-coverage glasses in the magnification that suits your age and viewing distance--from 1 diopter at age 35 to 5 diopters at age 65+. Don't pay the eye business $150 for what everyone your age needs. The right magnification is $12 at drugstores and discount department stores.

To make sure of the right number, measure your eye-to-screen distance at your 2000. Go shopping and try on glasses until the glasses rack (or other eye-level object) stays in sharp focus from ten inches under to ten inches over your standard working distance. Pick up another pair of half-glasses while you're there, for the car. Reading maps can be an emergency.

THE QUIT CITY FLEE MARKET

We have some offers to sell complete software packages and hardware, some new some used. These offers are answerable by letter or card to Orphan headquarters:

WordStar 3.3, entire package like new; member has bought an update to version 4 (thus the $89 update is not available for this serial number)--$25.

Wordstar 4, still blisterpacked--$300.

Upgraded Multimate, new and unused--$50.

Tandy 2000HD, no drive D outlets--$900.

Tandy 2000HD, has drive D outlets--also $900.

Complete giant 2000 system with software--$4500, a loaded 3-drive + external 15meg with color, 896K memory, 8087 math, original cartons, $4800 retail including the 1986 sale price of $1000 for the double floppy starter machine, plus a whopping $10,000 software pile, full packages with manuals. Software details, too much for the newsletter, available for customers ready to buy the big ticket.

A LITTLE WAITING FOR YOUR TRADING

There's more being offered, but for the present I need to get out this newsletter. I will dig out more offers from the pile in time for the next newsletter.

Many of you elected to lend or borrow software, and I don't mind your doing so, but I've got such a pile of entries, literally thousands of item entries with millions of pairings possible, that I just can't cope with it in April,

unless you want to wait another month for a newsletter. Okay, stop groaning, I got the newsletter to you.

The same holds true for those selling hardware, selling full software packages, or buying either. I'll try to list it all next issue. Given my lack of punctuality, think about sometime in June for that next issue. Even late June.

SOFTWARE, SHAREWARE, SELLWARE

About half our members prefer not to lend or borrow software, and any member's choice on that has my support. Some members are tired of certain popular programs, and are offering to sell the whole package, which is quite legal. Those doing so have probably stored a copy on their hard disk or in their floppy library, also legal, and since they have already learned the program, they won't need manuals if the urge to use it should ever return. There seem to be many choices open to those with changing software tastes.

A few of you have been notified that you must list your software before getting any member privileges, but take heart: our last newsletter was too vague on software tryouts--you ARE NOT required to lend or borrow anything! You are required to list the software you have, because this database enables the newsletter to include features that lots of members need, and exclude info for tiny minorities. The same applies to goodies from manufacturers.

Right now the Orphans are pursuing a patch for Wordstar 4, being aware that many members have Wordstar (or want it).

We can't force you to list your software, but given that various goodies like the Wordstar patch go out only to participating members, you are likely to cooperate.

Our lending/borrowing tryouts are slow in getting started, which gives some of you time to amend your offers (by mail to Orphan HQ). The consensus among those willing to lend expensive software seems to be about 10% of retail as a tryout price, so those offering $5 to try AutoCad, for instance, are looking pretty silly. As for the lower-priced packages, some members appear to like the 10% route, while another group, probably the younger members, puts everything in the $5 to $20 range.

WE INSIST

For those lending or borrowing, the rules once again: the BORROWING MEMBER must call the lender (a new rule), must pay in advance, and by participating is pledging to erase the disks within 15 days after receiving them--and to buy the program retail if he likes it enough. The LENDING MEMBER writes a sheet explaining FIVE points (hardware needed, settings of hardware required, booting the program, installing it so it runs on the owned hardware, and pulling up the menu tree and help messages); buys a disk box, stamps, and the right number of 96tpi disks; copies all the disks in the software; and sends the package, without manuals ·

PATCHES FOR YOUR PANTS

We are making progress toward what may be a working patch for the Wordstar 4 thesaurus. I actually have a patch disk, but so far I haven't been able to make it perform, so you'll have to wait for next newsletter. I will send this patch to members, when it works, for the usual $5 charge for club-freebie software mailings. Purchasing members won't have a development fee to pay, provided this patch eventually works for us. We also have a promise that it works the thesaurus on the 2000 for lots of other word processors, 30 or 35 was the number they gave me.

Our Tandy spy got us the 700 list, but it is hard to tell which disks might be useful to us. Orphans will do some research on what the items really mean to us. The only IBM-program "driver" so labeled was the Windows disk already revealed in our last issue. One disk could be a rumored MS-DOS upgrade for us that we haven't been told about, but I'll wait until more information comes in before I blow the whistle on Tandy. The very short one-line entry, cryptic like the others, says this: "700-2602 MS-DOS2.6 1.02/2K SPC Q" -- and another interesting one says this: "700-2615 MS-DOS UPGD 21124 SPC Q."

A DEAL FOR DISCOPHILES

I'd love to have just one integrated program and one data disk, but I seem to fill a 50-box every couple of months, and like the garage-stuffer I intend to use them all presently. First I was buying Tandy floppies for my 2000, their 96tpi at $4.50 per disk. Then I surrendered to a member who told me what a fool I was not to buy at 39 cents. When the read and write errors started cropping up, I returned them for credit, and this month bought a hundred of the same Tandy 26-410 disks, reduced by competition to $2.50, by a sale to $1.90, and by a franchise to $1.40. By the time you guys get this, that April sale will be over, but the 96tpi DSDD floppies are still around franchises for about $2 each.
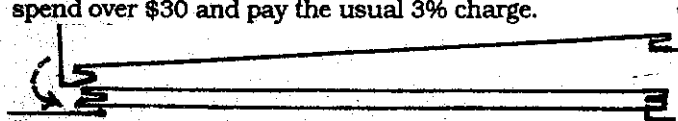
Hacker Two tells me that Tandy's drives they bought for the 2000 hate those reinforcing rings you get on the 48tpi disks. He says you really ought to buy the 96tpi disks, which are often called quad density and have no reinforcing ring. They have 10 mil jackets and a 65% clipping level, while the DSDD 48's have 8 mil and 50%. Note that these are not the DSHDs, AT style, which also have 96tpi but reportedly won't run on our machine.

You can't get the Tandy disks for $1.40 any more, but you can do better. I have secured a price, after calling a dozen disk wholesalers, of $1.16 per disk for BASF 5 1/4" double-sided, quad density, 80 track, 96 tpi disks for 720K storage. You call Western Computer Products Distributors at 1-800-422-4927, during the California business day. They're in San Jose 95131, at 2148 Bering Drive, locally 408-435-3070, in California 1-800-433-4927. Your minimum order is one box of 10, $11.60 including shipping, but not to our Alaska and Hawaii members unless they pay extra.

Be nice and order more than one, so I can keep them performing for us. You get a price cut by the case of 10 boxes (100 disks), $112 with shipping also included.

If you, like me, find those well-designed Tandy boxes for 50 disks to be habit-forming, don't pay Tandy's $9.95 on sale or $14.95 retail. Western is willing to sell these smoky-topped boxes, complete except for the Tandy nameplate, for $6.95 including freight. Again, buy several to be nice (and thrifty). The price shift is at a case of 12, for $75 including shipping (6.25 per box). A rack of these boxes on department-store "boards" keeps your storage system both efficient and attractive.

If these guys give you any grief, drop me a card and I'll ruin their week. If they're great, also let me know. You can do the Master/Visa number on them, although they're primarily wholesalers, as long as you're willing to spend over $30 and pay the usual 3% charge.

It is quite frustrating to force the stiff dividers into and out of these 50-disk boxes. The secret: just ease the plate as far left as possible, and the tiny conical tooth slips easily into or out of its slot. Then gently pull the divider an eighth of an inch to the right, and the other tooth slides easily in or out.

Our battery problem is solved, no thanks to Tandy, which has spent a year trying desperately not to buy the Toshiba CR2320. My wholesaler, who charges me 85 cents plus shipping, says Tandy called him months ago and asked him if he would resell to Tandy for the same price that wholesaler pays Toshiba--about 50 cents-- and not a penny more. Of course he refused, and Tandy got a story they could feed to the impatient dealers.

We charge the same as Tandy, $2.00, but we have it and Tandy doesn't. It only costs me about $1.50 including battery, shipping to me, a 22-cent stamp, a 4-cent envelope, and the certainty that I will eat part of my last shipment (I buy them 25 at a time), but your extra 50 cents can go in our club treasury. We spent $30 on the phone last month, probably $60 this month including my marathon with MicroPro (see review).

You have noticed a note with your battery from Orphans, saying "possible trouble." While I have not traced all the bugs, I do know that you should never touch that battery.

First, touch a chunk of metal bigger than a spoon, so your normal body static won't fry chips. Then, imitate cotton gloves by using toilet paper to grip the battery and move it from its package to its clock board socket. Use a wooden toothpick for prying--metal tweezers are instant death to the battery, and fingers make fingerprints, which have a high enough resistance to make the computer insist the battery is dead. A sweaty fingertip can short out the battery before it even gets in.

Chances are the positive spring clip will end up being loose, again causing the "weak" battery message. Even your present battery, if not original, may be reading "weak" because weakly clamped. Compare old and new batteries with a voltmeter, but NOT in the ohms setting which will blast the battery. If it feels loose when the battery is snugly pressed down to its negative contact, insert a 1/4-inch square of folded aluminum foil (try 8 or 16 layers), or any other clean, conductive spacer 1/16" or so thick, thicker if needed for tightness.

If you do touch the battery faces, scrub them with a soft, dry cloth or paper. Drag a folded cloth through the battery space, holding the clip down tight, to polish three years of corrosion off the contacts. You can't see it, but the four-nanoamp current can feel it.

The elusive CR2320 is, by definition, 23 millimeters in diameter and 20 tenths of a millimeter thick. It says "3V" but that is a lie; the clock board screams "weak" at 3.00, and the batteries are 3.18 to 3.22 when new. When the battery gets down to 3.05 or thereabouts, the calendar pages stop turning and all you get is the time. Many of you are making do with a smaller size "3V" battery, but it will drop to 3v a lot sooner than the three years the 2320 gives you.

SOUP UP AT SOUP KITCHEN PRICES

Things are happening at Envision. Control of the organization has passed from the relocated Hammervolds to their friend David Nechodom, no bad feelings. He has reduced prices and extended the Envision line of items for the 2000.

First, for anyone looking to decorate the sand in his fishtank, he has 32 cubic inches of pried-out 64K RAM chips from 2000s, which he'd be glad to unload to a breadboarder, collage artist or other chip collector. But more seriously:
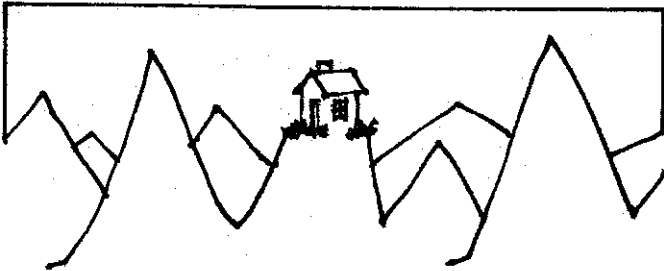
You can now buy Envision's remarkable 640K board for $375. If you have the jerkwater Tandy 128K memory board (with or without the 128K push-on chips), you can send it in before or after getting the 640 board for a $130 price reduction, bringing the cost of upgrading to $245.

Either way, you end up with 896K system memory, from which you can partition out a RAMdisk of any size up to 640K. Imagine having a fake floppy with an access time of one millisecond!

If you want more slot space, Envision will take your machine for a week and put the whole 896K on the motherboard (uses no slot) for $525. Then, presumably, you could use their 640 board as a permanent explosion-speed floppy disk.

All the Envision memory add-ons come with a software disk that modifies the 2000 DOS to recognize 896K memory, and also convinces the machine that the RAMdisk memory is a real e: or f: drive (or both).

I have told Envision that some of you see faults in the Envision system handling of certain (uncommon) software, and Nechodom replies, earnestly, please send him full details and disk copies so he can write you a fix, at no charge. I ask that you send me a report and disk of his labors, so other members can benefit through the newsletter.

_____ PEAK PERFORMANCE _____

Tandy, operating out of two skyscrapers full of executives and a stadium-size warehouse complex where they label and stack shiploads of hispano-oriental merchandise, doesn't even come up to the knees of a little house in hill-country Washington where one man gives our matchless 2000 a kind of support Tandy never dreamed of, except in nightmares about owners so fond of the 2000 that they'll never buy a 3000.

That little house is Envision Designs, 1539 West Pearl St., Pasco, WA 99301, 509-547-1139, but don't call him at 9 from the East unless you truly think he likes being waked up at 6 a.m. David Nechodom probably yells twice a day into his phone that he's got several pairs of real shoes and lunches at MacDonald's as often as you do, but let's face it: in all your life, business and pleasure, you'll never even fly within 150 miles of this world capital of the Tandy 2000.

For those of you wanting 896K on the motherboard and an 8087 math chip in addition, the total price for both is now down to $825.

Envision is developing a 40-megabyte tape drive for hard-disk backup, which will fit the spare floppy hole in the HD machine. And Envision has expanded the variety and reduced the price of its hard-drive kits.

PUT A TANK IN YOUR TIGER

All his hard kits are internal, and all include the drive, the power supply box, all cables and brackets needed to install everything yourself, and the controller card (an item Tandy lists for $350 or bundles with the $1000 10meg hard drive). The card takes up an expansion slot. He didn't say his controllers have external-drive outputs, and I haven't had time to call him to ask.

His hard drive prices: Okidata 20, $945; Seagate 20, $975; Oki 30, $1085; twin Oki 20's, $1365; twin Sea 20's, $1425. He buys his drives in quantity from Microtech International at 29 Business Park Drive in Branford, CT 06405, getting a discount which he cancels with a

markup, and he says he doesn't mind if a customer buys a drive from such a supplier, or already has a controller card, and comes to him for the remaining parts of his kit. However, it sounds like a week's work to save under $100 and screw up the guarantee besides.

Whichever way you go, you must admit that Envision's hardware support makes Tandy's look deathly sick, and they're about to be dead: A Fort Worth observer says the 2000 and its accessories are out of the next RS computer catalog, already pasted up and approved.

ONE MONOPOLY TANDY DOESN'T HAVE

The 2000 is a remarkably versatile machine, with better graphics than are available on other PC's even today, four years after the 2000 appeared – and all the power for numbers and words that we need. But one serious lack in its software has been games.

I have walked my kids through witness, rocketed them through planetfall, and crashed them through flight simulator, but the fact that these games are nearly impossible to win and at the same time a bit boring makes them wrong for kids 6 to 13 – the ideal ages to learn to enjoy the family computer. My kids prefer plain old Monopoly.

Now it turns out, while the PC was growing up, a kid named David Peterson was also growing up, with addiction to Monopoly. He kept his dream of PC Monopoly alive until both he and PC graphics had grown up. Then he bought the 2000 (sensible choice) for his dream, and spent the usual pajamaless month that stretches between every hacker and his dream.

The results are out, and suddenly my kids no longer flee my 2000 when it fires up. Gone are their sly digs about the Apples at school and Ataris of their friends being better – now they can play with Daddy, and make friends with a prince among computers at the same time.

Having properly installed the game on a floppy (see my suggestions below), I boot with Monopoly and watch with delight as the familiar multicolor board rolls down on the color screen (required), over a pale green background which extends beyond the board at right in a space for messages. Prices are not displayed on the property boxes, given our screen resolution, but we're still a sharper picture than the clones upgraded to EGA.

Then the board takes over, rolling your dice, doing all the banker chores, and even displaying your cash total in the message box. No more fights about money, no more waiting while a player blows on his dice and makes small talk. The game *moves* at satisfying speed, and those sudden shifts of advantage from player to player are even suddener!

One part of the game was too quick for me, and I asked designer Peterson how I could slow it down. The cute remarks on the Chance and Community Chest cards were flashing by in one second. His fix gives you a speed dial, and I now have selected six seconds as my read-and-smile time.

LAND ON GO WITH YOUR ON BUTTON

Here's how to give your color 2000 (I tried the green screen without success) the ability to be your Monopoly board and bank as soon as you turn the machine on:

Whizz off a $30 check to Everyday Software, P.O.Box 1962, Midlothian, VA 23113, or make it $38 if you want his program "Flags" thrown in – a striking playback of the World's flags that can flash by continually or be selected by country name. I find it relaxing to watch the pixel puddles roll up and down as the designs are painted.

When you sit down with the disk, tape its notch and set it aside. I warn you that while I was creating a booting disk, I kept crashing, and while other routines can be found that will work, this is my successful procedure: Take a good disk (described in this issue) and your original DOS disk (safely taped). Copy the hidden files MSDOS.SYS and IO.SYS to the freshly formatted blank, using the command

"sys." I had trouble when I tried the newer "copydos" command. Next, copy COMMAND.COM to the new disk, plus BASIC.EXE. I am having you use the original disk because I had bugs while trying the DOS that Envision's disk modified for me. The big Envision memories are not needed for this program anyway.

With your new DOS/Basic disk on the receiving end, copy all files on the Everyday disk, using "copy *.*" This leaves you with a disk that you can boot – and forgive my jargon, the newer computer users: when you "boot" a disk that means you put the disk in before you turn on the computer, after which the disk makes all the decisions about what comes up on the screen (or even printer) as the first activity of the session.

When you boot this disk, it just admits it's MS-DOS 2.11.02 and then sits down. If you would like it to roll your Monopoly game on, you create a BAT file (BAT is a stick you hit the puter with so it won't get lazy and sit down after turning on). Without this BAT file, you just type "basic mnply.bas" and the game rolls down.

PLAY WITH A BAT

To add the BAT (it really stands for a BATch of several commands to do at once), you wait for the A prompt and then keyboard in these instructions:

    A> copy con autoexec.bat (enter)
       basic mnply.bas (enter)
       (control-Z) (enter)

Then, to see if the BAT file now exists, tap in "type autoexec.bat," and the one line "basic mnply.bas" should show. For the acid test, poke the black reset switch on the front of the 2000, and watch for a long minute while your machine goes from nearly dead to the big red GO of Monopoly.

Peterson doesn't have a royalty he pays Parker Brothers, but he has certainly tried to enrich them. I also have written Parker, and they seem to take four months to send you a short, nasty note that implies that you're a fool to play their game. Peterson wrote them asking what their royalty system would be, and they wrote back that they don't give permissions. He wrote back that Tandy was already selling Monopoly for one of their baby computers. After the required four months, Parker then replied that Tandy didn't have permission either, and that they had no interest in continuing the discussion.

When I found some parts too fast for me, I called Peterson and he pretended to be perfectly content that I was cluttering his two-job workday and undressing his pride and joy. Nice guy. He gave me a fix, and here it is: If you find the Community Chest and Chance cards flashing too fast:

TINKER WITH YOUR TOY

Fire up the game—hit 2 (enter) for number of players —hit X(enter) and X(enter)—hit F6, F8, 1(enter), Y, Q, N.

You will notice a pale yellow box at left on Pennsylvania Avenue: it is a prompt for Basic, which is still using (holding) the Monopoly program listing. Type "cls" to wipe the screen clear, with an (enter), twice; the second time, it works, with a lovely purple-and-green screen. Now, the fix taps "edit 15325" and see a line of instructions, one at that is GOSUB 2100. Hit the right-arrow (not the space bar) until the cursor is on the first zero, and hit 5 to make the number 2150. Hit END and ENTER.

Then do the same kind of change to line 17100, change the 2100 to 2150. Finally, beside the green door you see the 2150 value, with the right-arrow, and add the spaces in that line.

Now make sure the protect notch has no tape on it.

The three hits of (enter) made the puter remember the changes you want in your Monopoly. Beware, if you do the same kind of fix with your next commands, give enter. Here. If you ignored good advice and are mangling your original Everyday disk, you are paying a horrible

penalty: your entire game is being wiped out, just so the disk can receive a new version that is one line longer.

Having done the save, you could just unplug the puter and have a pepsi, but build a good habit by going through all those doors you entered, backing out: "system" backs you out to the DOS prompt, and then turn off the machine. The full series of quits is a handy test of whether you're awake enough to avoid destroying hours of work; its other benefit is that many programs, when you try to exit, ask you if you know what the hell you're doing. Often, you don't.

This fix is not for everybody, particularly with my choice of six or seven seconds. Peterson, obviously, is a quicker player than I and can live with a second or two (4000 in line 2100, which he has thoughtfully preserved for people wanting to return to faster play). Whatever time you want to spend reading and giggling about the messages on the cards, give it a try by multiplying by 2500 and writing it in your line 2150.

After writing any trial fix, type "run" at the Basic box and watch the game board roll down. Play yourself and refuse all property with N-zero-enter, until someone hits a Chance or a Chest. There, was that the right length?

There's a lot going on that you might want to flash by at a different speed, such as rent collections, which automatically move cash from unlucky tenant to gloating landlord in a magic moment, leaving me less time to gloat or groan than I'm used to. Any of you might try, and designer Peterson should help you in his directions, to adjust the timing. However, once you've done the first fix above, you ought to know enough to read through this huge program and figure out the next fix yourself. Watch out: You might just learn a lot about programming, by accident.

HERE COMES TANDY

Tandy just bought a copy of Monopoly 2000 from Everyday, for its development division. Sure, it's a good program, but why does Tandy, which couldn't find a single additional cent for your mouse battery, spend thirty whole dollars on a game that runs on a dinosaur?

From here, a simple answer pops into view. Proud but wounded Tandy, anxious to slap even prouder IBM and ashamed not to have its 386 machine out yet, has decided to use the 2000's reputation to back a machine it will call the 4000, with roughly 1200-by-1800 graphics and a 386 chip. Expect the Tandy announcement in September, in time for the indoor hobby season, Christmas, and year-end company purchases for tax advantages. Ed Juge will be dribbling leaks all over the computer press all summer.

The machine will be, except for its sharper screen, an AT clone, increasing the momentum toward a clone-centered rejection of the new IBM line, a momentum already started by Compaq and the oddballs, Apple and Commodore.

Tandy's 386 machine was already so long overdue by the time IBM revealed its clonebuster line, that Tandy is certain to be committed to a 386 AT clone.

Next year at this time, you'll be able to buy today's Monopoly plus a Tandy 4000 to run it on, for only $5000 more than the game costs you today. Lucky you.

Whatever speed you play at, you've got to admit, this is Monopoly, with the same level of excitement and ten times the convenience. Bravo, Maestro Peterson!

Monopoly for the 2000 is clean design and as much fun as, well, Monopoly, which is saying a lot. But it is even more fun, because it has taken the dead spots out of the game. It will help us save the 2000 for more years of use, and it would have saved the machine for Tandy also, if they had not been so darn sobersides. A good marketer sells fun also, if he realizes that some of his customers have children and all of his customers have childish moments.

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