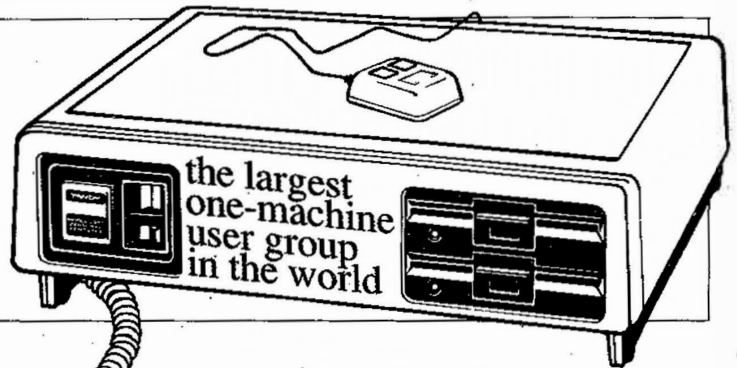
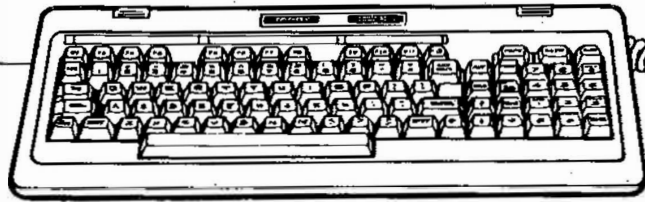


The Tandy 2000 Orphans' WHIMPER



year III, issue 5: March 31, 1989
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David R., coordinator

Open Secrets and Closed Minds in a So-Called Open Market

We often tell you that staying with the 2000 is fine, because of its power. It is also good that this isolation forces us to dig deeper into our big software, finding the hidden tricks that we would never use if we were bouncing to new software every year.

But one of these years you might jump to another computer, so HQ keeps an eye on the market. Here's where it has gone:

When IBM's PC sold millions, IBM was as shocked as everybody else. The PC was supposed to be a toy for amateurs, and had no place in IBM's grand scheme of American business dependent on IBM's million-dollar mainframes. They only did the PC because they were jealous of Tandy's great success with the Model 1.

IBM could and did get away with charging five thousand for each machine. But Tandy and a hundred other cloners leaped in with PCs twice as good for half the price. Included was the Tandy 2000, not fully compatible but four times as good. Suddenly IBM was in a market it couldn't monopolize, and they hated it. They upgraded to the XT and AT, but the cloners got there quicker and cheaper every time. IBM's emperor had no clothes and the industry was laughing.

Big Fish Wants Little Pond

Two years ago IBM desperately went to a new-style PC, incompatible with everything on the market. But buyers are not leaping to the clone-killer PS2 as they leapt to the PC. IBM's share of all personal computers sold has been slipping one percent a month since PS2 came out; it's down from a half to a fourth.

When IBM hired 200 extra lawyers to beat cloners away, corporation computer buyers realized that the PS2 line is a trap. It's

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designed to make them dependent on IBM once more, imprisoned by high prices and IBM's go-to-hell attitude.

IBM is really scared. They are cutting prices, talking sweet, and sneaking classic "compatibles" into the line. But IBM continues to make the wrong moves too late, and will be a sick company in five years due to its egotistical, malicious, slow-motion blunders.

Elect the Conquering Hero

The major PC game is now the compatibles that IBM sneeringly dumped two years ago. Some new things are happening.

The think-box business is near desk saturation: a computer on every desk. The question "What will my computer be?" has been replaced by "What will my second computer be?" That's killing off Commodore and Atari, game-boxes that nobody wants as his next machine. Nobody wants the slyly named "Next" machine either, which turns out to be incompatible with everything but Darth Vader's dashboard.

Apple, its little Dick-and-Jane screen loved by children, grimly grips its unchanging fifth of the market: all the schools and nobody

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else. Teachers buy Apple's Macintosh, the high-end Richard-and-Jane screen for weak adults. Commodore and Atari cling to another fifth of the market, the vanishing first-time buyers with little education.

Computers are also near to speed saturation. The 2000 is really twice as fast as a PC, but a 16mhz machine is not twice as fast as the 2000. The reason is hard drives. Creeping down toward a look-up time of 10 milliseconds, they're not going to get faster than that. In today's best computers, the lightning-fast motherboard spends almost all its time waiting for the hard drive to read and write itself. So the stylish clock speeds over 16mhz are not worth the money. And don't expect a rescue from optical disks: they're much slower than hard drives.

The main line, therefore, is "286" computing, almost identical to the 186 computing we have on the 2000. What was that about 386 computing? As Big Ed Juge said in a moment of frankness he now regrets, a 386 machine is like an 18-wheel truck for your morning commute. It's hard to operate and has no useful cargo. It will be years before you can buy software that needs a 386.

SX Is Not Sexy

There's a proposed middle ground, the 386sx chip. It sends 386 results out on 16 wires (like the 2000), rather than the 32 wires that the 386 uses. The 386sx costs \$100 less; its 16-wire computer costs \$500 less. But the 386sx will die. Its flaw is that the hotshot 386 is only being bought by showoffs. Such micro-macho buyers won't be interested in saving \$500 with a 16-wire bus. They're already spending an extra thousand for a 386 image.

IBM's microchannel does offer 32 wires, 32 messages at once flashing around the box. But so do the clones, the "industry standard architecture" (ISA). They have agreed on a 32-wire upgrade path called EISA (extended industry standard architecture). It's "extended" a mere quarter-inch. Push any regular clone board into an EISA machine, and it stops at two little ridges. An EISA board has slots that let it slip beyond the ridges to a second row of contacts in the computer. They carry extra messages. It's like an organist playing one keyboard with his left hand, and a step-up keyboard with his right.

EISA, led by Compaq, has Tandy support because it's "compatible" with the classic old standard. Tandy's 1984-86 heartbreak with the 2000 taught them that there's safety in a crowd, especially a clone crowd.

Back at panicky IBM, the new plan is

the 1960 plan: mainframes. Connected to herds of keyboards with screens, mainframes are (for IBM) the only good computers. But what's a mainframe? Even our Tandy 2000 has more power, memory and speed than a 1960 mainframe. Before 1992, five thousand clams will buy a PC that can do any job in any corporation, any government. The mainframe will be obsolete! And so will IBM, which has chosen to fight any trend it can't dominate.

So you have only two sensible ways to compute: with an AT clone using an 80286 chip, or the 2000 you've got with its 80186. You can keep the 2000 for nothing. So the 286 (with VGA video to match the 2000) would be a criminal waste of \$2500. You're sitting pretty.

What's So Great About a 2000?

Our letter in the February Personal Computing made claims of 2000 power which detail as follows:

We have a 142 meg hard-drive capacity. Two half-height hard drives connect to the 2000 hard-drive tray, one from inside. A second pair of ribbons snake in the crack from the outboard blue connectors. Each drive can be as much as 71 megs (Seagate and MiniScribe each makes one, street-priced at \$700, but the Seagate may not work with us). We go beyond the 32 megs (per drive) that our DOS HFormat gives us, by means of the program MLFormat by MicroLink (see Sidewalk Salesmen). It is also rumored that DiskManager, a floppy that ships with Seagates, can do the over-32 job on the 2000.

The Fifty-Dollar Superfloppy

Our so-called 20mb floppies are Iomega 5-inch cartridges, street-priced as little as \$57 each. They really only do 10 megs for us, but Iomega is (still) promising a software driver to get the full 20. The drives cost \$1500 (street) for a twin-20. \$1600 (twin-20 plus 2 cartridges) is a lot for 40 megs, but you can get further megs at \$3 each as you add unlimited cartridges. That beats the market hard-drive price of \$10 per megabyte.

Each cartridge is a pair of floppies inside a hard case. This permits the dust-free precision of higher disk density. At worst, we're stuck with 10-meg superfast superfloppies, which isn't shabby.

Those internal 3.5-inch drives? They are put out by another of our gurus, who runs Envision Designs. See Sidewalk Salesmen. The drive only runs 720K, since Orphan guru DN made it convince the 2000 that it was one of our regular floppies.

What's New at HQ

Sorry, Right Number

If you ever tried to collect a bill from a deadbeat customer, you know how they tend to get their phones disconnected. Now it turns out that deadbeat businesses work the same old scam.

In December we gave out a set of 800 numbers that Tandy salesmen use, but regular customers never heard of. Some lonely Orphan may have given them a buzz, and maybe they didn't feel like talking with him about his 2000.

They were so panicked, in fact, that they disconnected all seven of the 800 numbers that we gave out, numbers they have used since 1985. They pulled the plug a week after the December Whimper hit your mailboxes. (Okay, which member has been zeroxing our magazine to Fort Worth or a Shackman? I hope they're giving you a thousand dollars a copy, because it's worth a lot more than that to them.)

They used to answer the 800 numbers with "Computer Customer Service," knowing

no customer would ever call. But the new lines are calling themselves "Computer Support Services." It's a subtle distinction, meaning that they help computers, but NOT customers. Maybe you should have your computer do the calling.

Our duty is clear. All four Tandy spies, find a Tandy memo to all computer centers dated January 23, signed by Bob Meyers or Jim Nichols (there are two memos). The memo gives all the new 800 numbers. Zerox it to HQ and we'll print the new set. We love Tandy, even if they don't love us, and we should keep in (800) touch.

Whiz That Whimper

There has been a week's delay, and more out west, while the silly post office gets the Whimper from Connecticut to you. Most of the delay was taking place in a postal warehouse in Stamford, fifteen miles from headquarters.

The February Whimper flashed out with unbelievable speed. The entire East coast

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A new Orphan subgroup is being founded. It will have the members who are interested in machine language or groping for the Grail. They'll be looking into our dear computer's inner guidance system, its inscrutable ROM and BIOS.

The experts (they invariably call themselves semi-expert) in this group have been sending me information I am too ignorant to digest. Now they will each have the proper audience, and quickly — no waiting for the Whimper.

I'm mailing to each new Guru Gang member a list of all the others with addresses and phones. I suggest that each member zerox, disk or call his contributions to all others in the group. Try for a carbon copy (or carbon floppy) to headquarters. Please be gentle and tolerant toward each other: each of you has unique skills and blind spots, but you all need kindness.

The charter members of the Guru Gang are WMK, LJS, DN, RCS, HJB, KMS

The Guru Gang

and RCP. KMS would like to coordinate efforts and publish results, a valuable function if he does it with warmth and wisdom. Orphans who have written about joining a Guru Gang, I have a paper filing system and can't hunt you down. Please send in a new request and I'll hook you into the network.

When do gurus contact headquarters? Any time, of course, and you shall have the Orphan phone number. Let headquarters have disks of your assembly work, and reports in plain, non-guru English that can go in the Whimper.

If one Orphan is not a guru, it is Your Fearless Leader. The gurus snicker about me, but one member has the skill to call me ignorant and make me like it. LHC says: "I am pleased that I am learning more about our computer at about the same rate that you are. It is nice to have a newsletter that is always at my level." He calls a spade a spade, but makes me feel like the ace of spades.

had it in less than 24 hours, and it penetrated to Western wilderness members in less than 48. What gives, I asked the round elfin lady who weighs our brown second-class bags. The Stamford branch got computerized, she said. If they had checked with the Orphans, we would have told them computers are good.

Being Fair to Tandy

A member criticizes Tandy for "built-in obsolescence" in the 2000. Tandy does a lot of ugly things, but not that one. Tandy set out to build, in the 2000, the best personal computer in existence. With it, Tandy tried to seize the market from the puny PC and return it to Tandy. Tandy had led the market until IBM's little beast came out of Boca Raton.

The 2000 was to be the flagship of Tandy's line, a battleship computer to live and lead until, well, 2000. Tandy's execs loved the 2000 as much as you loved that sunshine sweetheart when you were 20. And the 2000 earned that love. By far the best damn computer on any desk in the world, it was so flat-out great that it stayed best for three years after

Let's Get Together More Often

As a result of the delightful new postal speed and the surprising ease of PageMaker, the Hamper is becoming a monthly with this issue.

Renewals now are \$24 a year, not a bad deal at \$2 an issue. We were charging \$3 per subscriber issue, at the old \$18 for six arrangement. Our second-class statement stays the same until the post office gets our application to go monthly.

The Hamper Is Getting Full

Orphan WKY has kindly pounded the whole May 1987 issue into electronic history, and it has been added to the Hamper.

The 1987-88 Hamper-I-b is now stuffed 720K full. It has all issues of those two years, but still lacks the late bulletins typed in with ragged right margins, up through Apr88. After that, the Orphan laser took over and there are no disk gaps.

Two members have offered to type in the raggedy parts of the Hamper. We will soon (watch for announcement) have a complete Hamper-I-c through through Oct88. A second disk in late summer will start with Dec88.

Buyers of the incomplete Hamper-I-a can get Hamper-I-b, or Hamper-I-c later (but not both), with no cost but your stamps. Send a boxed disk which I will fill up and stamp for its journey back to you.

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its 1984 debut. Even today, it rubs elbows with major new machines and gives them a healthy growl.

But the 2000 broke the hearts of those Tandy execs. It didn't sell, because Microsoft sprang a cruel mousetrap. Tandy had invested a fortune around the new language of Microsoft's 80186 chip. Then Bill Gates came out with the 80286. Using the 16 wires of the 80186, it went back to the language of the 8086 in IBM's PC. Suddenly a million IBM PC owners got a compatible upgrade path to the IBM AT. All the fancy software that ran on the PC would run on the AT, but it wouldn't even talk to the 2000.

Our Grounded Battleship

After this IBM/Microsoft ambush Tandy's mighty flagship ran aground, not the putt-putt PC. Only when its flagship was dead in the water did Tandy pull the plug and try to sink it. Orphans tied on a salvage line.

Tandy's execs had their salesmen lie, stall and double-cross, and I can't support that. But they never intended to sink the 2000 until the merciless market made that decision for them. It hurt them as much as it hurt us. Like any retailer, Tandy has to fill shelves with stuff that pays the rent.

JCF has met individual Shack people all over the country who "have been most friendly and helpful" about his 2000 needs. His local Shack manager has taken home and is learning a totally loaded 2000 system with lots of software, and is "tickled to death." Never overlook the possibility that a Tandy store person will help you. They can be people first and Tandy second.

No Computer Is an Island

A little ray of perfumy sunshine came into headquarters this month: We got our first Hawaiian member. Boy, was **he** lonely. That gives us our 50th state.

Hunting Haunted Hardware

The Tandy strangle is now going full speed. "My local Tandy store wants \$350.00 for the hard-drive controller alone!" reports PR. That same board, with a complete 2000 wrapped around it, goes for \$200 to \$300 in the Flee Market. PR, if you have to give up the 2000, have sense enough to buy a non-Tandy mail-order clone.

Too few members are selling their machines. But we do have guys who haven't renewed their memberships. I recently polled the first two hundred quitters, asking if they wanted to offer their machines in the Flee Market. No one sent a Flee offer, and a only a handful renewed. Apparently there's some kind of alien beast out there that not only eats 2000s, but eats their owners at the same time. Beware the 2000-getter!

2000s, oddly, are just appearing on Shack back shelves. MBM says some lease groups of 2000s are floating back into stores, and big sale groups (such as his local school board) are coming back in for trade-in credit of (in that case) \$200 per machine. His Shack will roll them over for \$250, fair pricing for a hard-drive machine.

Computer centers now use 3000s and 4000s as store machines. But every Shack that's not a computer center is unloading a 2000HD it uses for store accounting on July 1. Each store will be using it alongside their new 3000 during the June changeover. That's thousands of 2000s that will be shipped to Fort Worth that week, and put in the crusher.

Make friends. Peek at the back of each store 2000 and see what boards they saved. Expect to see at least HD (top drawer) and graphics (bottom drawer), with maybe memory or mouse between. Ask in very late June if you can have a few minutes alone with the condemned computer. Slip the man \$20 for a nice lunch. Have aluminum foil (to protect chips), a small bag, and a big swiss knife with you. Tandy doesn't care what's in the 2000 when it goes home to die.

Orphan-Friendly Manuals

Your Foolish Leader promised to create manuals for two items in the Souvenir Shop, DX and FS. DX (or SuperDOS) is that supreme directory that does a hundred things at once. FS is Flight Simulator.

The bad news is that writing them took lots longer than expected, weeks in fact. It was as hard as writing three Whimpers. The good news is that they are as much fun to read as the Whimper.

The even better news is that the alleged weakness of software manuals is proven. Microsoft took 144 pages to leave us thoroughly confused about Flight Simulator. The Orphan manual covers the same territory in two crowded pages, and half of that is chit-chat.

Let this be a lesson to the software makers: even the greatest program is only as good as the manual. Makers who blow \$500,000 on writing the disks, a million on advertising, and \$10,000 on writing the manuals, are putting out a \$10,000 program. The chain's weakest link and all that. Flight Simulator flies at last.

The shareware programs have been adapted by numerous unsung 2000 users over the years. Some of the painful work was done by our own LJS, who was not given enough credit in the last issue. As usual, he's doing great work. Especially nice to see is his improvement of the program we call DOALLDIR. It has been known as CO among the modem groupies. It made you reach for the INSERT and DELETE keys to mark and unmark file names on the list. LJS has put all the marking and moving controls on our arrow keys, handy at right front. This is a terrific improvement. It was also he who adapted PAINT, and he points out that it does no color (a Whimper error) "because it shortened/simplified things for me."

You might check PCMagazine for detailed instructions on some of their "Utilities" that LJS adapted, including PAINT. Sorry, I can't find his list of the issues they ran in, but most were 1988. In PAINT, the undocumented F4 (by LJS) permits boxes and other such graphics to go without laborious ALT-xxx typing onto a screen saved with CAPTURE.

Here's his F4 routine: Type PAINT<enter> and a blank screen comes up to play with. Hit F1 and its menu appears, but without the usual waiter to take your order that big software provides. You will notice that F4 says line drawing. Hit ESC and the menu vanishes. This is a cafeteria, remember. Press F4 and a menu of lines appears. Let's say you want double lines: hit 2. Move the cursor to where you want to start and hold SHIFT. Use the arrow keys to draw a box (or another design). You can hit F4 again, to add a different kind of line to the design. You even get proper joints between single and double lines "most of the time."

LJS, don't erase your letters to Orphans. Some month when I'm out of action (if ever), I plan to publish an entire issue of your great essays — from disk, I hope.

The Spirit of Giving

Ordering a pile of items without figuring out the total price, a member sent us a blank check. Now that's trust. Thanks for your confidence, TD.

Thank you for the cash gifts, DDP, LMS, LJS, MSS, DAB, DWK, FR and LHC. If I ever miss anybody, please tell me so I can give you an official Whimper thank-you. Thanks also to those who say "keep the change." We often say keep the change with a twenty-dollar bill, to avoid an extra wait and a pocketful of little coins. But it's just as easy to write 36.50 as 40.00 on a check, making your check-written "change" a true gift which is appreciated as such.

These insane two-year renewals keep coming in. I think you guys are having a game with each other to see who has the latest expiration date. The current record-holder is LB3, expiring 7-29-91. Hot on his heels are DAB and DLJ with 7-26-91. Up in the stratosphere by themselves are BN and JEP, who got honorary 1999 dates for their large cash gifts. I say "honorary" because I swear I'm getting out of this game one of these years. I plan to pay back every penny of unspent subscription money, even you silly two-year-men.

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Wave Hello, \$3000 a Finger

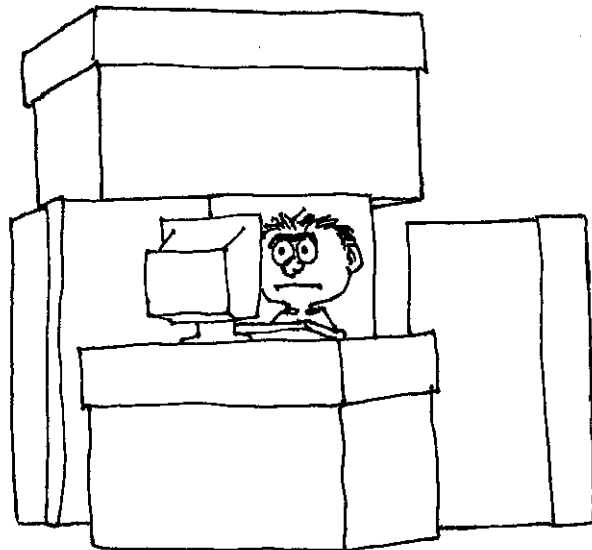
JH expresses relief at finding us, and asks why we don't run ads in the computer magazines. The answer is that we got one ready to go last year. But then we heard the price: \$15,000 for a full-pager one time in one of the big five — PCMagazine, PCWorld, PCComputing, PersonalComputing, Computer Shopper. Small ads in back are worthless: they reach one reader in a hundred, and he's not a 2000 owner.

More people will get lucky when they see our Orphan letter in the April PCComputing. We have now gotten publicity in three of the five majors in one year. Only PC Magazine and PC World have ignored us, along with little PCM and PCResource. One of you with a persuasive printer might give those guys a try; magazines resist whinnies from the horse's mouth, but greedily print tips from jockeys.

If you find that Envision is taking a week to answer calls and a month to deliver orders, that's because Dave has taken a full-time job again. You guys weren't sending enough orders to feed his family. He is still in

business, but it wouldn't do any harm to get your orders in soon. He can't last forever. One thing he's still well-stocked in is his motherboard mezzanine, 896K and a math chip downstairs with no need for a memory slide-tray in the back. He's not stocking chips, so expect that four weeks to be six weeks with a chips order. I bought my own from InfoWorld back pages and sent them with my order. Our 256Kbit chips are down to \$7.50. You need 18 for a tray upgrade to 640Kbytes, 36 for the Envision 896K motherboard.

History and Literature, Cheap



Headquarters is chaos as usual, but now it's hard to walk around the office, among the piles of 11x11x17 boxes of old issues. There's no reason to continue this mess. New members apparently don't know how vital the old issues are to solving today's 2000 problems, so later issues have been piling up faster than the earlier ones sell off.

This will seem unfair to you guys who have intelligently stocked up at \$5 an issue. For that, I'm sorry. Every back issue of 1988 and 1989 is now on sale at \$2 an issue including first-class postage, which is 45¢ or 65¢. See the Souvenir Shop. I expect every member with good sense to grab every issue he doesn't have.

The sale will end when an issue gets down to 50 copies. Those who send \$5 per issue will get all they order plus a \$3 refund with each issue still on sale. Senders of \$2 for an overbought issue will get \$2 back. The zeroxed out-of-print MayAugOct87 have to stay at \$8, little Mar87 at \$5. Some original Dec87's are available for \$5.

Hardware Help

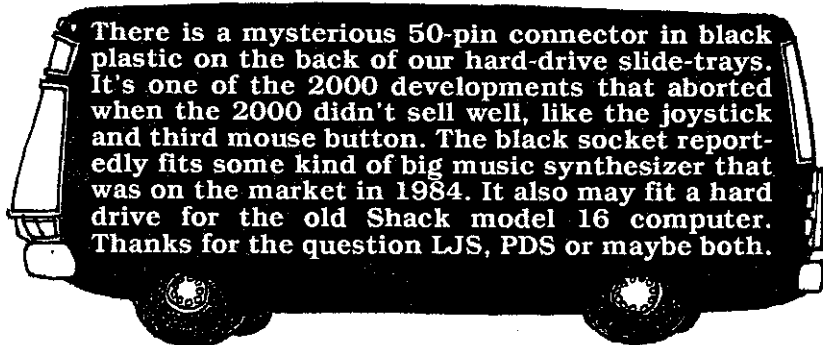
You're the Doctor, Doctor

Half a dozen members have sent us the legendary Tandy 2000 Diagnostic Disk for which others have been quoted up to \$800 or a flat refusal. It's about time the rest of you had it to play with. You'll find it in the Souvenir Shop. We are still looking for the floppy-drive alignment disk; who can get a copy? The DD won't repair your 2000; you'll still need Tandy repair. But it will give you a strong idea about what's wrong (or what isn't). This will make the repair guy more respectful (even a bit resentful). If you don't mention the DD but name the trouble, he'll suspect you're a guru and charge you bottom dollar.

The disk originally came with documentation, but we have been unable to get a copy. I read through the DD manual once in Fort Worth, and it's about as technical as a brownie recipe, like "type DIAG<enter> and do what screen says." The screen does give explicit instructions and reports, but tends to use guru greek, so have your bookstore textbooks handy.

The Diagnostic Disk usually gives the magnificent 2000 a perfect score, which makes the day a little brighter.

Black Bus to Nowhere



Crashes Come in All Styles

Making floppies with DOS Backup is a good daily routine, but keep in mind what they're for. Assuming your hard disk dies, do you have another 2000 with hard disk ready to take DOS Restore from those floppies? If your only spare machine is an (ugh)compatible, you'd better be keeping your backups uncompressed (with DOS Copy) on 360K floppies (formatted with our DOS PCMaker).

At headquarters, we don't use Backup and Restore. We keep programs and working copies on the hard drives. The program disks from the software manufacturers and members are filed safely away. Every day's Whimper and Orphan databasing grinds onto a floppy after the work session. Even a 20-page Whimper in PageMaker takes only 320K, half a minute of floppy grinding. If you run a roomful of computers, however, your people should have a more formal backup routine.

There is an odd trick with our 720K floppies that HJB observed: while they won't read or write on an IBM AT, they do both on the AST Premium286, an AT clone. So if you're hoping to transfer data from your 2000 to a clone, check out the clone's 1.2-meg floppy drive: it might work for you.

Anyone who has a broken digi-mouse, please send it to Orphan Jack Doerr. He wants a set of mouse guts to see if he can create a trackball or joystick mouse for us. RCS claims to have done so already with an Atari 2600 (roughly) joystick, but hasn't sent the details.

Printers that skip things or make garbage behave with the Tandy 26-2820 printer interface, RGA reports. This \$100 box apparently solves some hardware conflicts that non-Tandy printers have with the 2000. It deals with parallel (ribbon) printer cables, not serial lines. RGA is delighted with the results. The worst you can do is try and return it, so it's worth a try. It's handy, incidentally, to switch among two computers feeding two printers, and the switching can be manual or come down the wire from the 2000.

Our statement (December88) that aluminum foil would protect a disk from magnetism was wrong. RST says that aluminum foil is transparent to magnetism.

Is our Suitcase.com similar to the shareware program Shiptrak.com? Yes, it's so similar it's identical.

The date inside KIH's 2000 clock board got all excited when 1988 ended. "It knew it was supposed to do something with the year — so it changed it to 1987!" All you do is call DATE and type in the right year with your date, but it's cute to see the mighty 2000 make a dumb mistake.

We sent out 12 extra screen fonts in the new Orphan utilities disk. But KIH found out that the original 2000 screen alphabet is in an extinct chip that cost Tandy a bundle. No video font on the market today approaches its clarity, even with EGA or VGA.

Those Original 2000 Manuals

Those of you who got 2000s second-hand, they came with two fat loose-leaf manuals, which Tandy still grudgingly stocks. They are the MS-DOS manual, describing the slightly oddball disk operating system of the 2000, and the Basic manual, about the popular programming language that is packed on the disk with our DOS.

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The term "disk operating system" is misleading. It is a set of instructions that the 2000 grabs from its DOS disk when it is turned on. But those instructions tell the 2000 more than how to read and write its disks. DOS also runs the keyboard, video screen, rear-end cable connectors, and slide-in circuit boards. It should be called the EOS — everything operating system.

The Tandy 2000 DOS manual is MT-2605103 (\$23.25); the Basic manual is MT-260513-H (\$16.29). The prices are well worth it. Tandy computer centers must order them for you, but will tell you they can't until you hang around asking questions, getting customers curious about the legendary 2000. As soon as you screw up a sale, the salesmen will give you the service you should be getting, just to get you out of the store.

If life is too short for this hassle, you can order them from Tandy National Parts; their secret number is 800-322-3690. Also try 800-442-2425, which may be secret also. These numbers are often busy, but do the same as with any other busy number: try Tuesday morning before coffee time, not Friday or Monday. They have Fort Worth numbers, I'm sure, but I don't believe in toll calls for what's rightfully yours.

He Saw in the Dark

If your dot-matrix printer prints a black screen, as JKH reported in February, don't despair. TF let the whole black page print on his FX-185, and found his picture in there, faint white lines on the black. He redrew his screen with the BASIC command COLOR 0,7. Lo, a reversed screen, and aha, a black-on-white printout.

"I wish my version of Open Access would recognize an 8087 chip for the spreadsheet," says HM. In my opinion, HM, all programs recognize the 8087 all the time. In other words, the installed 8087 board intercepts all math functions before the 2000 can try them, and does them at its usual high speed. But another member says the 8087 won't get off its fat rear end until the software calls it.

Anyone who wants FrameWork printer drivers for the NEC P1 or P2, write HQ and I'll send you CC1's address and phone. He says they're free, but chances are he wants you to pay for the call and mail a boxed, formatted disk with return postage and gratitude. That adds up to the standard Orphan charge of \$5, which he says is too much. You figure it out.

Your Superfast Hard Drive.

Every one of us would like one of those expensive, new hard drives with an average access time of 10 milliseconds. Our old Tandy 10meg did 85 milliseconds, and the MFM (modified frequency modulation) drives that run on the 2000 today do from 65 down to 20.

But if you have any hard drive, you already have a drive faster than 10msec, hidden inside it. JAD (of Sidewalk Sale flipchart

fame) noticed that after he adventurously partitioned his 40meg MiniScribe into eight chunks, using MLFormat, his programs were running a lot faster.

Fascinated, he figured out what was happening. When you do something that uses a broken-up file, your 40meg drive skips through the whole 40 megs for every index, word-count, search, anything that reads the whole drive or a broken-apart file.

But if you have put your thesis or database into one 8meg partition, the drive only skips through that 8 megs. You get fast action from the small "drive". Using a relatively slow (61msec) MiniScribe3650, JAD calculated that he would get less than 8msec average access time in each of eight 5meg partitions. He tried it and did.

Your Instant Library



When you move from a plain-Jane double-floppy with A: and B:, you're going to sip some alphabet soup. If you have two half-height drives in the 2000, JAD notes, the first might partition into C:D:E:F:G:H:I:J:. Then you tell your formatting software that the second drive should be (for instance) K:L:M:. Don't repeat the letters of special drives. You might have cartridges from Iomega or imaginary drives from Envision memory. The HQ machine, for instance, has A:floppy, B:floppy, C:D:E:F:10meg parts of a 40meg Seagate251, G:H:"drives" of 20K each using Envision memory, and I:J:10meg Iomega cartridges. With a couple of big half-heights in there, you could run through the whole alphabet.

Buddy, Can You Spare a Time?

It's a huge pain to tell the dumb 2000 what time and day it is, every morning. And if you just hit ENTER ENTER it gets worse. You later find that all your files are dated January 1, 1980, and it's hard to get them organized. If you build three versions of an article, the directory can't tell you which is the most recent. A clockless 2000 always thinks the time is 00:00 when the electricity comes on. You need a clock.

The clock battery is no longer carried by Shack, KIH says, so she sets the clock by hand every day. Not necessary. We have a clock-setting click routine in the Orphan toolbag disk, called snapday.

Better, regular Shacks sell wafer batteries called 2025 and 2032, which almost fill our clock battery socket. They are catalog numbers 23-161 and 23-162, \$1.79 each. They last about as long as the original 2320, being smaller in diameter but fatter. That 23 (in 2320) means 23 millimeters in diameter; the 20 (in 2320) means 20 tenths of a millimeter (2 millimeters) thick. For your comparison, a penny is 1912, a nickel 2120, and a quarter a wider but thinner 2418.

Only the Best for Your Pest

Don't be fooled when a 3V battery is called dead by the 2000 mouse board, but reads 3.0 on a voltmeter: 3.0 is the used-up voltage. Fresh batteries are 3.2 to 3.25. Replacing a battery is touchy, as we showed in some 1987 Whimpers. Basically, never touch a battery edge with metal (it burns out) or its face with a finger (skin oil is an insulator). Use plastic or wood. Fingers on edges only (like in coin-collecting) is okay. The + side faces out. If the + clip seems too loose, slide a 2x2 piece of aluminum foil, folded into a fat 1/4-inch square, between loose clip and seated battery.

Many members came into 2000-land without a clock/mouse board, and some that have it are tired of replacing the battery. There are plug-in clock chips out there in the magazines selling for \$50. But their 28 pins don't fit in the 24-pin sockets of our oddball ROM chip on the motherboard. What to do?

Our Club's Club Sandwich

Envision Designs' honcho, Orphan Dave Nechodom, has a solution. He can get those chip clocks for less than \$40 in quantity, and has solved the pin problem with his usual skill. He buys a 24-pin socket with 24 pins of its own underneath. He plugs the 28-pin clock into the top of the socket, making two layers. Finally he plugs an Envision-made ROM chip on top of the clock, making three layers. During all this plugging, he does half a dozen jumpers (soldered extra wires) and disconnected pins.

Then he sells you this heavily engineered, labor-intensive club sandwich for \$46, less than the street dealers get for the clock alone. Reading his instruction sheet, you roll over your 2000, hinge up the motherboard, pry out the designated ROM chip, and delicately push in the Envision Clock Sandwich. You put clockget in your autoexec.bat and then you type time, date and clockset from the A: prompt. Both clock files are in the Orphan utilities disk.

From then on, time and date are always with you — and on your screen if you use PROMPT or KLOK2K from the orphan utilities disk.

The Orphan toolbag disk, if your clock is running, has a couple of ways to flash date, time and a cheery hello on your screen when you start the 2000.

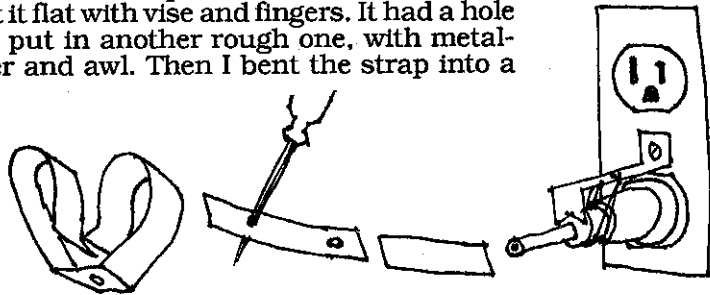
That Stinking Sinking Feeling

When you shift in your chair and your foot pulls the plug on an all-night piece of unsaved work that's due at 9 o'clock, it isn't a good feeling.

The people who made our world didn't do such a hot job, as you may have discovered. One dumb thing is, they made plug-in computers but they didn't make plug locks. (Yes, they make a rotating lock-plug that wipes out two ordinary receptacles, but who wants to rewire the office?) But Your Fearless Leader has the answer.

Check the hardware store on your next trip, and get everything they've got that's made of strong steel strap about two inches or longer, preferably springy with a hole or two. I got two little clips for hanging things on walls, one for brooms and one for tools.

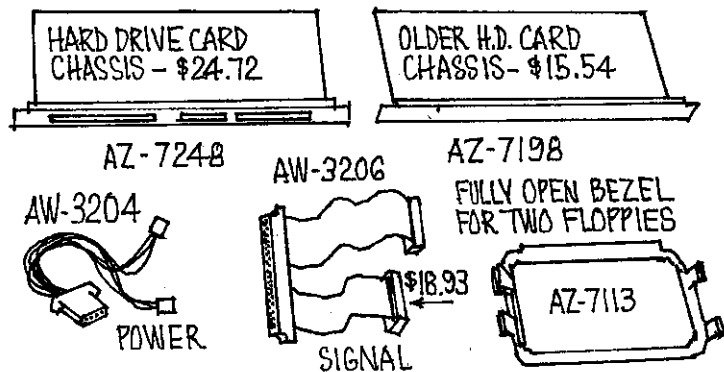
I did best with the screw-driver holder. It looked like a tulip with a hole in the bottom. I bent it flat with vise and fingers. It had a hole and I put in another rough one, with metal-denter and awl. Then I bent the strap into a



straight-up zee and screwed it on between two plug sockets. That screw is the strongest part of a wall plate. I put the computer plug back in and tied its cord (right by the plug) snugly to the second hole in the strap, with wire.

Five Easy Pieces

There has been some confusion about parts related to hard drive installation. We have a photo of some major ones which I now translate into a drawing. I'm sorry, but the identity of the member who gave us this clarifying photo display is missing. Thank you anyway, and a credit line goes in next issue if you write me a reminder.



Floppies Forever

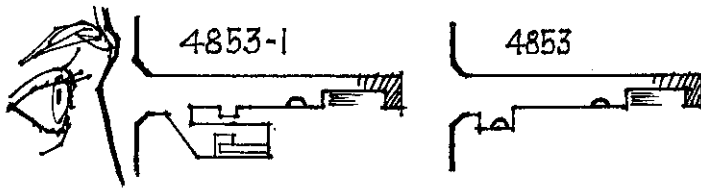
Apparently we are never going to stop getting "the final story" on which floppies run in the 2000, so here's more information.

We have identified two different floppy drives in the 2000, and their different habits. The Mitsubishi 4853 is identified by looking in the crack of the unlocked drive. A dull gray metal floor under the diskette space reaches back to the hub, a shiny steel ring. Back near the hub is one screw head. Near the front of this "floor" is an empty hole. Under the floor in front, some drive guts are visible.

The 4853 is probably a standard 1.2meg (high-density) drive altered to read our narrower 720K band on the disk. It works fine with ringless, "quad-density", 96 track-per-inch, 720K floppies, Tandy#26-410. It also likes high-density disks, the more thickly

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coated 96tpi type for an AT compatible. The 4853 is not fond of hub rings on disks, and occasionally objects to the common "double-density" 48tpi disks that are made for IBM-type 360K drives. There is nothing "double" about those 360K disks except that they are coated on both sides. The original IBM PC used only one side of a disk, 180K.



We use another kind of floppy, the Mit-subishi 4853-1. If you peek into its front slot, you see two screws in front of the hub instead of one, with no hole between. The front screw is on a little shelf by itself, holding a metal skirt that hides the drive guts under the floor.

The 4853-1 is apparently a standard 360K drive altered to write and read a more densely arranged 720K. 4853 and 4853-1 "use a different magnetic field from the read-write heads." The 4853-1 therefore hates high-density disks of the AT type, which explains the frustration a dozen of you met with Orphan HD disks recently. The 4853-1 seems to get along fine with cheapo double-density disks, hub ring or not, which the 4853 might reject. Both kinds like the Tandy #26-410 and other brands of ringless 96tpi disks.

We owe these insights to SGG, JIG, the 2000 *Maintenance Manual*, and Your Fearless Leader sniffing around the varied headquarters machines. One part that rings wrong is that numbering makes 4853-1 seem more modern, but compatibility with HD disks makes the 4853 seem newer.

If you have time, tell us your drive style, its habits, and the serial number of the 2000 it's in.

Do floppies have personality? It looks that way in a report coming in from CC2: "When when using PCFormat to reformat to 360K a disk already formatted to 731K, or doing the reverse, I have found that it sometimes fails, but succeeds on the second pass. Maybe it's being fooled into only doing 40 tracks at a time."

Power Users All SQUAT

For complete protection from your own errors, SQUAT whenever you leave the room. It means Save, QUIT And Turn off. Big work days are fine, and big nights meet deadlines. But never, never go until you're too tired to remember to SQUAT, or your work will magically disappear.

A PC card cage with standard IBM-style PC cards, no matter how ingeniously hooked up to our machine, will not work, RST. Our motherboard does not speak or listen in a language that PC boards understand.

We had only three requests for the Genealogy program, so the information on it goes out by postcard. ("Uncle Fred on a Floppy", Dec88 p.11.)

Some guidance for Symphony users: KIH used the Orphan disk load-us.com to relieve her of the drudgery of keeping a disk in the A: drive. But it seems you should be quick after typing LOAD-US. Unless you hit the F1 and F10 with reasonable promptness, the program bombs out and has to be loaded again. The good news is that once you do it, Symphony is apparently fixed for good: no need (Whimper was wrong) to keep load-us in a reusable batch file.

The Grail gets little attention this month, but this item from ELC is fascinating. He says that IBM-compatible Varsity Scripsit, a Tandy word-processor with lots of Windowing, contains an installer file called VSETUP.EXE that can change it to run on the 2000. Like the Tandy Windows driver, why can't one of you devotees of MASM and A86/D86 wander through the guts of VSETUP looking for short-cuts to the Holy Grail?

Son of a Batch

On batch-within-a-batch, the HKF technique reported in February, he says the /C tells the 2000 that the next word(s) will be a command, and will require a temporary load-in of command.com. The batch can't find any virus-protected command.com that has the "hidden" attribute set, but "read-only" works. Using the line EXIT is unnecessary and unwise.

The /C may mean "use a Copy of," DJS says, and agrees with HKF that the EXIT line is unneeded, "as the /C already told MS-DOS this was a one-shot deal." He got this from *Tricks of the MS-DOS Masters*, a book he reveiws with, "Don't stay home without it."

If you use the newer 2000 Basic on a CM/1, here is a patch from CC1 that allows you to shift out of color and graphics modes into monochrome text: PATCH BASIC.EXE 64B1,B401,9090 <enter>. He says this is an easier way (with DOS.03) than DEBUG for any change you wish to make. He's right. The above simple command means, "Take yourself



into Debug status and look at the Basic.exe file. Find address 64B1 in that file. You will find the hex digits B4 and 01 at that spot and the spot after it. Change the B4 to 90 and the 01 (also) to 90." This PATCH trick that our latest DOS brought us is a great simplifier. We published this patch in 1987 in its scarier Debug form.

Support

Stop Wrecks with Autoexecs

You are unlikely to get hit by a virus, but RST of Whimper Index fame found comfort in the auto-compare suggestion we made in December (page 12). As he describes it, put roughly these lines into your already hard-working autoexec.bat:

```
echo off
fc c:\command.com
c:safety\command.dup
echo Does a discrepancy show? If not
pause
echo on
```

The result will be a blank screen with these lines on it:

```
Does a discrepancy show? If not
Strike any key when ready —
```

If you have a virus-tampered command.com, the screen will display some lines which have been changed in your working command.com. FC compared it with a copy of it that you renamed command.dup and hid in a directory called SAFETY. If a discrepancy shows, turn off the machine and boot from a spare DOS floppy. Immediately recopy command.com from the floppy, on top of the damaged command.com you found. Write down your recent disk use, to see if you can figure out where the possible virus might have come from.

This trick won't save you from anything the bad command.com did while you were booting up, but you can prevent it from infecting other software during your day's work.

Easy When You Have a Menu

There's another neat trick with autoexec, from the March 89 PCM (page 30). Canadian Cam MacDougall does many different jobs on his computer. He has a pile of one-letter batch files. To jog his memory, his autoexec.bat screens a menu listing as its last good deed. You might also do this in a separate file called menu.bat that you could call any time. Add roughly these lines to the end of your autoexec.bat:

```
echo off
cls
echo E — essay
echo C — customer database
echo R — recipes for bartending
echo L — lottery number picking
echo M — modem communications
echo on
```

All you see onscreen is "E — essay" and so on. If you don't type "echo off" first, it will roll out all that garbage above, twice. "Echo on" is to get back to a normal DOS screen.

This maneuver lets you put a lot of batch jobs on your opening "menu". You can include comments, cautions or lists. You can do it in two or three columns as easily as you can type them on those "echo" lines.

Your Own Windows 1

Windows is great fun, and useful too. Those who want Windows 1, the only one that runs on our machine, keep sending your names in. Orphans will send names out to members willing to dupe. They will call you as soon as they get the names. And those willing to dupe, please keep sending your names in.

You'll be lost without a manual. If you don't have a Windows 1 bookstore book, the complete \$50 package in Sidewalk Salesmen is the only sensible way to go.

Each of you people ordering Windows will get a phone call from your duper, who will tell you his(her) address. Have your spouse, secretary, machine, kid, etc. ready to write down the message if you're not there. Don't stretch out the conversation; it's not your nickel. Then take six new unformatted Tandy 26-410 disks.

Format each one to 360K density, by typing PCMAKERA: /V. (You can use B: if your new disk is in B:) When the program asks you for a volume name, type in exactly these six names for your six disks: SETUP, BUILD, UTILITIES, FONTS, DESKTOP, PROGRAM. Label each disk with volume name and your name, address, phone. Put the six disks in a fat box without squeezing. Don't seal the box. Put address, return address and a big "FIRST CLASS" on the box. Put in a check for \$10.00.

Take the box and a roll of 2-inch package tape to the post office. Learn the postage amount and buy two sets of stamps. Pack one set of stamps with the disks, close up with tape, lick on the other stamps, and mail the box. Expect to get it back in two weeks.

That's \$50 worth of trouble! But either way, you will need the Tandy tweaker disk (see Souvenir Shop) to do Windows on the 2000. It comes with a one-pager to get you started.

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old. Way

new. Way

DJS points out that his favorite word-maker, Volkswriter, likes to skip only one space after a period, "when it should put in two."

Thank you for bringing up this important point, DJS, and it brings us into a discussion of typography at the dawn of the laser age.

Monospaced text, what you might call typing, looks best with two spaces after each period (and colon, question, exclamation). That's because monospacing is hard to read, and you need all the hints you can get. Small i is so lonesome, small m so crushed, that the big gap after a period is a welcome relief.

But when your printer gives you easy-to-read proportional spacing, like what you're reading now, the two-space gap after a period is no longer needed for guidance or relief. In fact, the two-space gap looks ugly in proportional spacing. So when you get proportional-spacing capacity and start using it most of the time, type only one space after close-out punctuation.

Software List Update

Smartware, by Informix

Program Problems

Microsoft Assembler 5.1, which CC2 is using, does "assemble" 80186 instructions, he confirms. MASM 5.1 can translate an instruction like "do the last ten instructions again" into two or three wild symbols that the inch-square black chip in the bottom center of our 2000 can understand. This is good news, because as far as I can find out, our 2000 is the only computer in the world that uses that chip. How nice that MASM cooperates with it.

But here's the problem. MASM 5.1 has an enchanting toy called CodeView that the 2000 can't handle. It runs your program and displays the results it's getting, but in another box on your screen it shows the instructions it is following. This makes understanding (and fixing) those instructions easy. "If any of our Gurus could figure out a way to do CodeView, it would be a real blessing."

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All Ideas Click for the Successful Type

Where can we find a touch-typing trainer that runs on the 2000, RCS asks. He hopes it will be suitable for kids. We got one among the Orphan shareware disks sent in, but it refused to run. I have ordered and returned several that also didn't run.

Touch-typing now means more than braces, A's and letter-sweaters for success in tomorrow's world.



Sharing the Pain

The Orphan shareware has three problems reported by CC1. The QBAS patch doesn't adapt QuickBasic to the 2000, as its title claims; it adapts programs which were written in QuickBasic. PAGE skips lines randomly as you flip down, he says, although it replaces them when you use PG UP or arrows. Finally, CED crashes his machine after 45 minutes, which I find a surprise. CED has been running for months on a HQ machine with no visible problem. However, I'm thinking of going back to NDE, which flashes up the most recent commands. CED starts with the first use of the last command I re-used, even if it's fifteen commands back in the stack.

Reviews

Readability Plus

The folks in Maryland who market Readability have come out with a revision, the "Plus" version. It's not a major change, which is lucky because the program is great.

They have branched out into greater detail about what you might be doing wrong, but this is not a picky grammar checker. Readability scans your entire text in a few seconds, and makes a guess about how hard your stuff is to read. Their thinking begins with the number of words in your sentences. The number of long and short words in each sentence fills in the picture. The program checks how you distribute common words, how you group big words, and so on.

Then Readability lays out every sentence and many word groups on 16 revealing graphs. A bar graph of a Whimper can take dozens of screens to go by, a Macy's Parade of ballooning sentences.

The analysis is punch-in-the-stomach accurate. When you're tired, when you're not quite on top of your subject, when the phone is ringing — you write junk! And like your best English teacher, Readability not only identifies the flavor of junkiness, but points out all the worst examples of it.

One future development I'd like to see in the program is pulling it inside a word processor. When you see what atrocities you have done to your native language, you want to slice the offending sentences apart right away. Readability makes you print out the bad ones and then use your paper "trouble map" while you tour the article in a word processor.

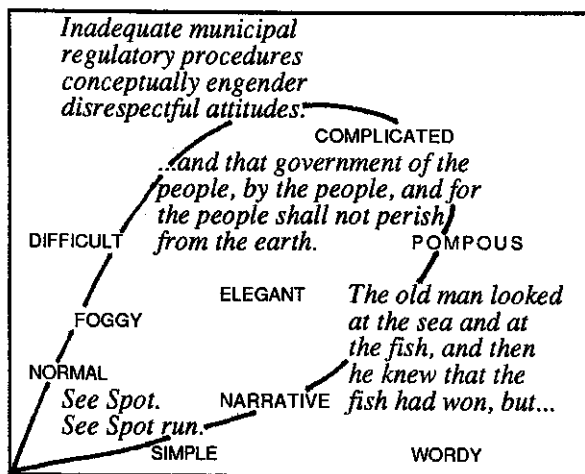
What Your Stuff Looks Like

All the graphs are fun (if you don't mind exposing your worst faults), but the winner is the "style diagram." It lays out the good part of your work in a tear-drop-shaped corral, a colored cluster if you're on CM-1. Outside the corral you see every one of your scattered "deviant" sentences. Some have wandered off into territory marked "wordy", meaning long sentences without a lot of big words. The worst offenders are seen straggling across the "pompous" desert, many words and many of them big.

If your sentence has big words but is not especially long, your strays end up in the "complicated" field. That's Your Fearless Leader's most frequent mistake. Sure, the writing is about a tough subject. But if it isn't good writing, there won't be good reading.

The style graph lets you arrow over to a stray and click its first line onto your screen. It's always a bummer. "How could I write that crap?" you ask yourself, and you rewrite it. In the process, you notice shorter sentences nearby that Readability didn't point out. But you were in the same mental fog when you wrote them, and you find that they tighten up nicely, too.

Laff at Your Graff



The repair is always easy. There's always a short word that does the job better, and there's always a neat way to chop a trash-barge sentence into three parts that take off with silver wings.

The program is not trying for childish simplicity (unless you click the children's book category). Within their ingenious teardrop corral, they encourage you to spread out and get variety. They encourage the minor differences in the name of style. Their approved styles, all moderate versions of the bad stuff, are simple, normal, narrative, foggy, elegant and difficult. All these regions, and the good-guys teardrop, shift shape with their purpose. A steamy novel to keep housewives in slippers till noon uses a long flat teardrop (long sentences). A technical manual takes a high, fat teardrop (long words).

It's like having your best English teacher in your pocket every time you sit down at the 2000. Readability Plus sells for \$85 until April 31 (yes, they claim there is an April 31). After that time, it's allegedly going to be \$100. Both those prices include shipping and a 10¢ tip, Jack Benny's old specialty. 301-294-7450, Scandinavian PC Systems. They'll make a writer out of you.

Let's Hear It for Unsung Heroes

Multimate 3.3 "is a dynamite program," says BDA, who has "been using it for years," and has "never tried the other word processors that you often talk about."

Varsity Scripsit, although manufactured by Tandy, may be an excellent word processor at a low price. "It uses lots of windows," reports ELC, "and it has help screens for everything. It has a program called VSETUP.EXE that allows setting it up for a 2000." This is apparently a rare throwback for Tandy, marketing a program today that contains hidden support for yesterday's 2000.

Volkswriter Deluxe, says DJS, is a powerful program despite its age (1984); but its updates don't run on the 2000. Since it is no longer sold, we don't print his review, but those who see it around should grab it.

A Closet in Your Pocket

Isogon's **NewSpace** is a slick trick that doubles your 2000 hard drive. If you have 30 megabytes, you suddenly have 50, even 60 with simple ASCII and number files.

The program is "transparent" after your half-hour installation; you can't see or feel it operating. I noticed no slowdown.

It only guards one drive. Among C:D:E:F: on the headquarters Seagate251, I selected D: for the giant capacity.

That's perfect, because NewSpace ignores command files. All .BAT, .EXE, .COM and so on will be moving out to C:. On the nearly-doubled drive D: will go all documents and data files, such as the Orphans, with a tremendous saving of space.

You and I know that no disk lives alone. Files are constantly dropping in for dinner (or a week on the couch). And files drift out, to other hard drives or far-flung floppies. Like a doorman, NewSpace compresses files as they come in. When one is leaving, NewSpace stretches it back to full size as it goes out the door. "Ineligible files" like command.com slip in and out without changing size.

NewSpace installation crashes on the 2000, but their tech guy David Horne kindly worked out a 2000 fix. You ignore their "install" program and do these DOS steps:

Make sure that the CONFIG.SYS has at least FILES=10 and BUFFERS=20. Copy NEWSpace.DCX and NEWSpace.DCD to the drive you want "bigger". Make a directory called NEWSpace on that disk, and copy NEWRES.EXE and NEWSpace.EXE into it. Finally, add to your autoexec.bat the line NEWSpace /D=F, where F (without a colon) is the drive letter. On autoexec's PATH= line, add F:\NEWSpace.

From there on, the manual's COMPRESS and STATUS commands finish the job. Dumb DOS DIR has no idea anything has changed, but STATUS gives you full details on how much things have been compressed. The manual is a nice job, and that's rare.

Doubling the return of your hard-drive hundreds, this is a honey of a program at its \$90 price. Their PR guys rubber-stamped "\$69.95+\$3.50S&H" on the releases they sent me, so say the Orphans got the lower price from John Chodes in Marketing. He's a nice guy. 800-662-6036.

"I wish people would stop knocking **Open Access**," says HM. "It is a very powerful and easy-to-use program."

Those having trouble getting OA to run at all may be using later versions that hate the 2000. Only version 1 is compatible; it may have been a special 2000 version that Tandy paid to adapt.

"Love the **Norton Advanced Utilities**," says HM.

DBXL will be updated later this year to solve its 2000 bugs, MC reports. "It's nice to

know that there is still a company willing to keep the 2000 in mind," he adds. I called their PR contact, Corinne, who confirmed that a new version is in the beta stage and would make no promises about release date. A beta copy is a messy tryout disk that a company sends to its favorite correspondents and reviewers with a dot-matrixed manual, for their valuable reactions.

They're Live at Five

Aside from the usual tricks for easing WordPerfect5 into our 2000, we have some users who stamp their feet. Enough of this tech talk, they say: let's take a moment to admit that WP5 is a wonderful program.

As I remember the reports of WordPerfect 5 graphics, you can bring them in, but they're invisible on the screen and only show up in the printout. Someone said they appear, but in low resolution. Someone else said they show as an empty box. KIH suggests (and I agree) that the problem may lie in the mysterious "trace 1" that you dig out on the graphics board (as directed) when you push in the color chips.

Trace 1 on the graphics board is hard to explain but easy to snap. All the headquarters 2000s have a little toggle switch on the graphics backplate, with a pair of six-inch wires soldered to both ends of the scraped-off trace 1. Many programs respond to an ON or OFF of that switch. Pleasant changes appear on either a color or mono monitor. They affect either color or mono programs, with or without graphics. The effect of trace 1 is so utterly random that all I can say is, it helps about one program in ten.

Trace 1 leads from inside some color circuit to ground, and is only used as an "are you there" check while the 2000 is booting up. To see its effect on a program, you have to flip it, reboot the 2000, and then call up the program.

WordPerfect 5 on the Okil92 gave KMS trouble until he set the 2000 to MODE LFON and the printer to LF-off. We get that story a lot.

"I run WordPerfect with color and speed," says WR. "I pull Desk up first, set the date, then go into WP. The color goes along, and WP works up to B&W speed."

I'm confused about "Desk," but I think it's a file called desk.exe from Tandy's Desk-

margins in characters and having to recalculate. In 5.0 you set margins to inches and leave them alone. Here's a brief example. *You can go all the way from really big to really small and include italics, SMALL CAPS and shadow without any change to the margins.*

mate 2000. Possibly, however, there is a file called "desk" in WordPerfectLibrary. Windows has no Desk, nor does DOS or WordPerfect.

The Hoyenga Report

Last time around we said that members should ask WordPerfect for their latest update. Wrong! KIH updated her September88 5.0 to November88, and it was buzzing alive with bugs. Maybe a new set of switches would fix it, she suggests, but WP/2000 guru Harrell has just finished his 25th month of ignoring messages from Orphans. We figured him out last December on page 13.

With the Nov88 WP5, a printer out of paper or a wrong keystroke crashes the 2000. When KIH returns to WP it crashes again because of the bodies lying around, WP temporary files. She had to delete them carefully from DOS every time around the frustrating loop, and after a while she went back to her September 5.0.

How good is 5.0, compared to 4.2? "Despite my problems," says KIH, "I couldn't go back. Blocks of text are now moved with six or even three keystrokes." She is now devoted to macros (which 4.2 had to some extent). New guys, a macro is an unlimited pile of commands and type-in text hiding under a two-finger keystroke. WP5 will format and style a heading, tag it for a table of contents, tag it again for a references list, all with key-press by KIH. And she can change the style of a whole document with another keypress.

WP allows you to revise printer drivers, but KIH finds it "took me two eight-hour days to correct a couple of minor problems with the DWII." At \$10 an hour, that \$160 would buy another printer. "However, I had a great time." If programming hours are either valuable training or refreshing entertainment for you, don't consider them a cost of computing.

Since that was a fairly lengthy contribution, we identify its author as Katharine I. Hoyenga of 1123 Stacey, Macomb, IL 61455 (and Idaho in the summer).

The Knowles Report

We have more enthusiasm for WP5 (compared to 4.2) from John G. Knowles, who lives at 570 Thomas Ave. in my old home town of Rochester, NY 14617. He writes:

I'm writing this on WordPerfect 5.0, and despite some of the recent bad press in the Whimper, I think it is a vastly superior product to 4.2 on the 2000. First, the ability to mix fonts on the same line without adjusting the margins is much better than setting the margins in characters and having to recalculate. In 5.0 you set margins to inches and leave them alone. Here's a brief example. *You can go all the way from really big to really small and include italics, SMALL CAPS and shadow without any change to the margins.* 5.0 also adjusts line height automatically by point size of the font. 4.2 didn't do that. The printer definition program is superb. After you start with your printer definition (mine is DMP2100P on printer disk 7), you can add

downloading fonts, font cartridges and enough flexibility to keep me content for quite a while. You get graphics on the printout.

You start by running **MODE COLOR** (if you're on a CM-1) from the DOS prompt. Then type **WP/NC/NK**. That gives beautiful color, but without true typefaces or any graphics on the screen. Use **SHIFT/F1** for "setup", select "display," and then "text only, no graphics." Now both "view document" and "graphics display" work, but not very well.

You can exit WordPerfect at this point, call **MODE BW** and then only **WP/NC**. This takes away all the pretty colors but makes WP run fast. And if you do your **WP/NC** right after running **DOSCLR** [Is that a shareware program? —Ed.] or Lotus, WP keeps the colors of the previous program.

I use **PRN** instead of **LPT1** with no problems. I bring in WP clip art and Lotus graphs. I have trouble printing the test document they provide, but can print my own stuff.

5.0 would be really incredible if someone came up with a **WP5** screen driver for the 2000. We also need a way to import **HPGL** plotter graphics (WP can do this) and save the **RS232** output intended for the plotter, to disk. Then we could put nicely boxed plotter drawings in **WP5** text.

Souvenir Shop

Your order—Please order by the short title, like "03" for **MS-DOS 2.11.03**. All prices include postage, packing and handling to the 50 states. **FOREIGN Orphans**, add \$5 per order of any size, for the extra stamps and that customs hassle at the post office.

Money—No credit cards and no foreign checks. Only U.S.A. checks (preferably) or U.S. cash. **NOTE**: A foreign check or money order is OK if it came to you with "dollars(U.S.)" and a U.S.A. branch-bank address printed on it.) "Orphans" or "Tandy 2000 Orphans" is good on the pay-to line.

DISKS

DIAG: Tandy 2000 Diagnostic Disk, won't fix your machine, but a nice way to confirm your opinion of its health (or sickness). Tests your slide-in boards too. \$10.00.

FLY: Flight Simulator 1, the golden oldie that runs on the 2000. \$10.39. Its Orphan manual is far better and far briefer than the original. Great fun in color, it works with **VM-1**, graphics board required, mouse optional. Landing a plane is very hard, but banking insanely between the World Trade Center towers and buzzing Miss Liberty's armpit makes up for it. Grab the ring-bound **FS** adventure books if you can find them in a store. Very helpful is the big **FAA Flight Training Handbook** you can get at airport pilot stores and **ASA Publications**, 206-763-0277. The Orphan **FS** disk can't be copied to a hard drive or anywhere else.

UTILS: Selected utilities, programs to make the 2000 work more efficiently and give

more pleasure while doing so. \$10.00.

DIRS: Selected directory programs, which list the files in a disk nicely, often with controls that let you to perform **DOS** actions while the files are on-screen. \$15.00; the extra \$5 is for a **Whimper-sized Orphan manual** for one powerful program on the disk.

TOOLS: Selected gadgets and devices which do special jobs for special needs, and for fun. \$10.00.

03: dos 2.11.03. If you picked up an older **DOS** with your 2000, you should have this latest and last 2000 version. It has a newer version of **Basic**. \$5.31.

123 (123E if you have **Envision** memory): **Unprotected Lotus 123 version 1**, Tandy 26-5300. \$5.09, send your original program disk and get it back unchanged with our copiable version. We need your original to keep out of copyright trouble.

FW (or **FWE**): **Unprotected FrameWork 1**, Tandy 26-5320. \$5.03, and do as in 123 above.

DB (or **DBE**): **Unprotected dBaseIII**, Tandy 26-5353. \$5.11, and do as in 123 above.

TWIN: Not **Windows** itself, but the Tandy-written **Windows Driver** disk which enables the 2000 to run **IBM Windows 1**. Formerly their #7002611. This disk slyly erases drivers for non-Tandy printers, but we've added instructions for avoiding this trap. \$20.07. A **Windows** explanation is on p.18, Feb89.

TRAP: **MouseTrap**, called **Locate** by its author. It lets our **digl-mouse** run the arrow keys, the **ENTER** key and the **F1** key. Now the mouse works in **DOS** (typing at the **A:** prompt) and in any software. \$20.19.

BYTE: **Creative Byting**, a disk on how to write user-friendly software that sells, put out by an apparently out-of-business disk publisher. \$5.00.

HAMP: The **Whimper Hamper** disk I, 1987 and 1988 **Whimpers** on disk, useful for word-searches but less relaxing than paper copies. The missing **May87** issue has been added, and some stories that weren't on disk have come in. They may push **Dec88** onto a second **Hamper** disk. Disk I, \$40.00. Current **Hamper** owners wait for the next issue for details on your free upgrade.

DOCUMENTS

ATTENTION! We are running a sale of back issues. See *What's New at HQ* for why we're doing it. Ignore the prices below: All of 1988 and Feb89 are available at \$2 each including first-class postage until each issue's surplus is gone. No price change for 1987, except note that we found a small pile of Dec87s and are selling them for \$5. Send \$5 per issue if you want your full order with a \$3 refund taped inside each still-on sale issue. Send \$2 per issue if you want your \$2 back for sold-out issues. No mixed orders (\$5 and \$2), please.

BACK ISSUES: Mar87 \$5, MayAugOctDec87 \$8 each, all in zerox form. Original Dec87, FebAprJun AugOctDec88 and Feb89 \$5 each.

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MOU-MAN: Tandy's clock-mouse installation manual, 16 pages compressed into eight zerox pages, \$6.00. See just above.

MAST: Mastering the Tandy 2000, a compressed 28-page zerox of a 100-page out-of-print book mentioned in the February issue. Reprinted with paid permission. \$16.50.

NEWBAS: List and description of extra BASIC commands in the Basic that came with DOS 2.11.03. 24pp. compressed to 8. \$6.

MODS: All the mod service bulletins for correcting bugs in earlier 2000s that have no "M" at the beginning of the serial number. Usable by anyone with soldering iron and screwdriver. 70 pages compressed to 32, \$19.

512: Instructions for putting 512K (or more) on a Tandy 2000 memory board. 7 pages zeroxed, \$3.00.

VID: List of Tandy 2000 video ports. 3 pp. zeroxed, \$2.00.

VIDRAM: Info on video RAM and attributes by BJK. 1 page, \$1.00.

VM3: Modifying a Tandy VM-3 to work with the 2000, by MOR, has pictures. 4 pages zeroxed, \$2.00.

TP3: Making Turbo Pascal 3 run on the 2000, a one-page patch supplied by BJK. \$1.00.

TP3+: The same patch as above, but with more explanation, 3 pages supplied by JAD. \$2.00.

TP4: Using TurboPascal 4 with 2000 by BJK. 4 pages, \$2.00.

SAVBAS: Saving a Basic color screen by HEB. one page, \$1.00.

SOURCE: a hard-to-get list of some or all of the source code for the 2000 BIOS, supplied by LJS. See Feb89 p.5. 4 pages, \$2.00.

IBMPORT: A book chapter listing and discussing IBM-style hardware ports. It's useful for assembly-language programmers among us, trying to convert IBM-style software for the 2000. 29 pages compressed into 15, \$12.00.

HARDWARE

BACK SCREWS: Mandatory mod #16, eight fat black screws (Tandy AHD-2974) for the four back panels of the 2000, in an envelope. See Feb89 p.12. Eight dollars from Tandy, \$2.00 from Orphans. Extra sets of eight in the same order, \$1.00. Eliminates many burps and blackouts of the 2000.

Sidewalk Salesmen

Sidewalk Salesmen, in the opinion of headquarters, do good work. They do not pay for being listed.. Prices include shipping to 48-state contiguous USA.

Extension cables custom-made for any wire to, from or inside the 2000, \$20 to 10 feet, an extra dollar per foot over that.

Tandy 25-1040 mouse rewired as the extinct \$99 Digi-Mouse, \$95. Orphan cable-maker Tim Bates, 313-227-7344, before 9 p.m. eastern.

Function-key flipchart, ten stiff 1 1/2" by 11" pages in a 19-ring plastic edge-binder (specify ivory/brown or white/blue). Slips into existing slots above the 2000 F-keys and displays written or double-face-taped-on key functions for your ten favorite programs. Dirt-cheap and utterly indispensable after you try it. \$5.00.

Complete shrink-wrapped Windows 1, \$50 with manuals. Several rare copies. See the Windows explanation on p.18, Feb88. No serious user of the 2000 should be without this package. Orphan chartmaker Jack Doerr, 22407 Bayview Drive, St. Clair Shores, MI 48081.

Envision Designs: software, boards and upgrades, send or call for latest catalog. Their latest invention is a push-in chip clock for \$46, adapted in a complex way from the incompatible chip-clocks you see in magazines. See the discussion in this issue. Orphan boardmaker Dave Nechodom, 1539 West Pearl St., Pasco, WA 99301. 509-547-1139.

MicroLink Technology: software and upgrades. Their MLFormat lets you break up large hard drives into smaller "drives". Orphan programmer Bob Spencer, P.O.Box 2666, Sumter, SC 29151. 800-334-9612.

Flee Market

PLEASE NOTE: All entries are 2000-specific items (no printers or modems) having all original parts and papers unless otherwise noted (mail-in cards will be missing). Ask about version numbers of software to avoid misunderstandings.

PRICES include shipping to anywhere in 48-state continental USA. Prices may be negotiable, especially shipping a 2000 if you're unusually close to the seller.

NO LONG OFFERS: 3 lines (240 spaces) is the limit for software, and 1 line (80 spaces) for each 2000 with its monitor and boards. If an item is not sold, you can send it in again with a price cut of at least 30%.

VM-1, \$75. Much software getting too little use, \$10 to \$25 plus about \$5 shipping. PFS series, MPlan3, HomeAcctt, MASM, Deskmate. 601-956-8526, ask for Ted.

Tandy Windows adapter disk, original with original instructions, \$20. Volkswriter 2, \$50. 2000 Basic manual, 2000 DOS manual, \$10 each. 312-355-7180, Mr. Shoemaker.

Double floppy (the 4 backplates missing) with VM1, \$350. 214-785-5289, Tony.

A tip: There was (March 3) a 26-1186 graphics tablet for \$115 in the Orange, CT computer center.

Double floppies, five @ \$175 each. One with busted A drive, \$75. VM-1s, six @ \$50 each. Vianet boards, six @ \$75 each. 404-641-6411, ask for Rhonda Mason.

SuperCalcIII and SofTerm2000, \$50 each. Jack Doerr, 313-777-5900 days.