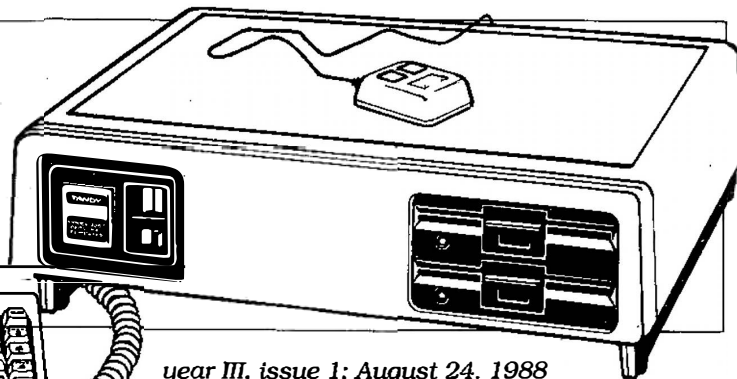


The Tandy 2000 Orphans' WHIMPER



year III, issue 1: August 24, 1988
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David R., coordinator

Geez, I Wish I Think That

We lovers of the 2000 have a gentleman named Dave Nechodom in woodsy Washington who somehow figured out that you can pull all those 36 little chips, each having 7K of RAM, out of our motherboard upper deck and replace them with modern RAM chips having 28K bytes each. Gee, why didn't I think of that? Brilliant!

Now, in July 1988, we get a letter from a guy who bought one of the first 2000s in 1983, double-floppy with a standard 256K, unchanged in five years, only takes it out of the garage on Sundays. But he's been thinking, ever since. [Now let me mention that that the 7 and 28 above count "bytes," and they mean the same as the more popular numbering that calls the old 2000 chips 64K (bits, a ninth of a byte), and the modern ones 256K.]

All alone by his plain-vanilla 2000 on Robinson Crusoe island, he finally sees a footprint in the sand and writes us:

"I just read the article in the July 1988 Computer Shopper, and this is the first time that I have heard of your group. I would like to get more RAM. Why can't 256K RAM IC's be installed on the little stand-off RAM boards already attached to the motherboard? My local dealer says that only 64K of the 256K will be read, because the memory management chip is an old one capable of reading only 64K bit chips, and I say that's pure B.S., because memory management is done in the 80186 chip, and only a software (DOS) change is needed. This would allow a very economical RAM enhancement, so has anyone done this?"

Egad, here's this guy all alone, no idea that Envision and MicroLink and the Orphans have seized the banner that Tandy let fall, and he's figured it all out! It's positively creepy, the way geniuses think alike, as if all those ivory towers were connected by microwaves. Welcome aboard, WHW, and Orphan headquarters salutes you.

Your Ticket Is One-Way

There's a 386 in our future, we predicted in February (page 3), but I take it back. The June endorsement of the new Orphan laser printer gave us some unexpected market research that killed off a wrong assumption.

The bad guess: Some time in 1990 the Tandy 2000 Orphans will suddenly become the Singapore Switchers, with a thousand of our members jumping together into a newly endorsed Orphan computer, some bad-selling badly-documented badly-supported 386 machine that we buy in a shipload deal for a price that would be like \$1500 today (a steal), even less then.

Next, Orphans puts out good documentation, good support, and roadmaps to the best add-ons at great prices we negotiate. Suddenly, we have the best of the computer world, as the 2000 was in 1984.

Naturally, any group that would make that jump would also leap to a laser printer we could use with the 2000 and later our 386, when Orphans found the best laser on the market at the lowest PostScript price. Right?

Wrong. To date, remarkably few Orphans have bought the TI 2106, heartily and officially endorsed in the June

Whimper. I had expected a hundred buys the first month, but we didn't get a tenth of that.

Where does that leave our 386 future? Finito. There's nothing shabby about the speed and video of our darling 2000, so the Orphans will just stick to our original machine, until your fearless leader gets tired. Maybe two years. And when I quit, I'll go down with the ship, having learned my lesson with a chess club: I built it up to 150 members, as many as 100 at a weekly meeting. When I "elected" a president to replace me, the club lost 90% of its members and its gusto in a month. A year later, it was dead.

Meanwhile, we continue to view the chaotic computer market from the catbird seat, expertly milking power from a proven performer while the compatibles and the clone-killer IBM machines beat each other bloody, while Apple clings desperately to the high school market and sues everybody that "steals" their picture of a cluttered desk with keyboard control.

ORPHANS
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ANTEED

One of our members recently bailed out and grabbed a Tandy 4000, for a mere three bills plus a lot of necessary "extras." What did he get? Another 4000 buyer is staying with the 2000 anyway. WDR reports that AutoCad on the 4000 with EGA is not nearly as good as AutoCad on his trusty old 2000.

As we pointed out last time, the fact that most new software fails to run on the 2000 is a blessing: instead of losing days in salivating over new stuff, we invest the same days in deeper explorations of the software we have. You can get a big upgrade of your software absolutely free in money terms (but costing some time): read the back of the manual. There are immense buried treasures in all our major software. Like the young prince in the castle, you haven't even been in most of the rooms.

Multitasking Here and Now

A major selling point for the new OS2 and its equivalents is multitasking, the ability to change from one big job to another at the touch of a key. This is mighty handy stuff, but aside from our Windows 1 which sort of permits it, we have two versions of stone-age multitasking right here at Orphan HQ, which a lot of you are already using but haven't had the courage to call "multitasking."

First, when one Orphan job is on the main computer, I can pop others into the kids' 2000, and HQ will soon have twin VM1's with twin keyboards next to twin floor stands, for the next step beyond multitasking, simultaneous tasking! No keystroke, just swing your eyes over, and slide the old roller chair a bit to hit the other keyboard. There isn't a computer on the market that can give me that kind of

convenience, even for \$15,000.

And there is another kind of multitasking that every one of you does. It's called working at your desk and at your computer. You swing over from the keyboard and flip through some paper, and eureka voila, you're multitasking. As long as you make the heavy processing happen behind the green screen, with the light browsing and sampling on the desk, you've got the best of all possible work stations. And you don't have to spend another dime.

The Overdue Agony of Defeat

There's more going on in this market than meets the eye. PC's have for years screeched that their power was almost as good as minicomputers. Minicomputers, it seems, are hundred-thousand-dollar items that stand midway between PC's and mainframes. Well this year, suddenly, the makers of minicomputers find their orders falling off sharply. Like the betamax and the 45rpm record, the minicomputer has been crushed between its competitors.

And whither the mainframe? IBM has been explaining the agonizingly slow start of its PS2 by saying it's only for tie-ups to its marvelous mainframes. Well, the amazing 360 was IBM's mainframe of the sixties, and PAE now reveals that the mighty 360 "had the colossal RAM space of 256K," which is the bare minimum on our 2000. Before too long, mainframes by IBM will take the same nosedive I predict for their minis and micros (the PS2s). I and some others will dance in the streets when IBM goes down.

And what, after over a year of the Microsoft's OS2 and IBM's PS2, is the big change? No increase in performance or results, as Compaq and the other main-line cloners hope you know. The only change is using a Jaguar for around-town errands where a Jeep will do.

If you want to write and publish a magazine, or control a string of stores, the 2000 and the clones do the same job as an OS2/PS2 combination, at about the same speed. The big difference, the huge difference, is that Jeep-and-Jaguar jump: software that fits on one floppy suddenly requires ten floppies; programs that run pleasantly using 500K of memory suddenly require 2 megs to get started; software that streeted for \$200 suddenly costs \$700; computers that cost \$1000 to \$2000 are costing \$5000 to \$10,000.

What's wrong with computer shoppers? The only difference that PS2 and OS2 are trying to bring us is expensiveness! Egad, marketwatchers, the emperor has no clothes!

If you loiter in the safety of the 2000 a while more, you may finally see the long-awaited destruction of IBM's personal computer business. And that crash will vibrate even IBM's bread-and-butter mainframe sales to those captive Fortune 500 guys.

Envision Turns Pro

2

It had to happen. With all the demand from Orphans, Dave Nechodom has had to quit his nine-year programming job at a potato factory and give Envision Designs his full time. You can expect quicker service from him, and I will expect more of his great enhancements for the 2000. He's still operating out of one sacred don't-come-in room in his house, just as Orphans is (except that nothing is sacred to the kids infesting Orphan HQ).

One final potato note: You skeptics may not have seen the famous Nechodom coil-spring french fry. Our gain is the food industry's loss. They'll never find another guy who can twist a french fry. And with someone who can computerize a potato on our side, there's just about nothing we can't do.

Nechodom is hoping to bring out a 286 board that runs at 16mhz and fits in the 2000, running along with our 186 chip. The combination would approach 386 speed. He is also playing with an internal cartridge drive, I don't know what manufacturer, with its controller on-board (using no backslot). The cartridges would cost \$95, a trifle expensive at \$9.50 a megabyte. Our various hard drives (not quickly removable) cost only \$10 per meg, and our floppies cost only \$1.50 (see floppy article) per meg. The Iomega internal (uses

a card slot and Tandy's DCS board) uses \$60 (street) 10 meg (labeled 20) cartridges, that's \$6 a megabyte.

Can Do, Prefer To

Every Harvard Business School type will talk your ear off about the evils of not delegating authority. But the computer is changing that, by permitting one person (such as you and your 2000) to accomplish mountains of work.

The trouble with delegating authority is that you have to decide what things you want the others to do; then you have to go out and hire those others; then you have to train them; then, even if you did all that right, you have to worry, and you take the flak when things go wrong, because, finally, it's all your fault even if it isn't.

That's why I still don't send out software for review. That's why I haven't had someone set up an Orphans BBS. That's why I don't hire a secretary for the clerical work -- even if you were ready to pay \$50 a year dues!

Call me stubborn, but I think that running the world's biggest one-machine user group is a clear demonstration that the computer can do just about anything, if its rider thinks hard and works hard. Your 2000 is power.

Thank you, DAB, EMS, KM2, RTF, AEB, RKA, JE, WMK for the cash gifts. You have helped all Orphans.

Thank you, SE, for the pile of 80 Micros, all of 1984 and 1985, ending October 1986. We were also sent PC Companion, January through August 1986, and I regret that the contributor's name has slipped off my desk. Thanks, whoever you are!

Thanks, WCC, for your offer to join our Brawn Trust. But due to an avalanche of apathy reported last issue, there isn't any.

An Orphan Near You

After all my promises about public domain disks and a new 2000-software list, you probably don't want to hear what I have in mind for our next goodie, but here goes: many members have asked for names of members near them. Often, you have already met the other Orphan in your town, at the sale shelf in Shack, but just as often, the contact is not yet made.

So I plan to sit down in front of a giant gazetteer and type out longitude and latitude of every town on the Orphan address list. Then I'll hook up a program in Supercalc3 which, in an all-night grind, will calculate and store the addresses of every Orphan within 100 miles of each Orphan.

You guys who have offered to do work for HQ, here's your big chance: Who among you is willing to accept a list of cities, towns and rural post offices, and type in the numbers, sending the disk back to me for calculation? Even classier, who among you can supply HQ with a gazetteer on disk, avoiding all that typing?

When it's done, I'll send out lists to each member who orders one, quite possibly for \$5, but with a refund for the unlucky ones in wide open Orphanless spaces. Only one Orphan within 100 miles of you? A \$4 refund. Don't be surprised if the Orphans you find this way are not simpatico; people are people. But you can share your experiences on the 2000 with anyone.

Now let's get a head start, you guys who are far away:

David Dayton of Mayaguez, PR (833-9242) and Ivan Bou of San Juan, PR (859-2231), give eachother a call! Michael Molloy of P.O.Box 60-152, Titirangi, Auckland, New Zealand, why not get in touch with William Eason of P.O.Box 64, Brookvale, NSW, Australia? You might get to see eachother when one travels. And in Alaska, we have Jerry Floyd in Anchorage (562-4407), Sherman and Wilma Staton in Soldotna (262-4843), and Keith Maxwell, also of Anchorage (243-2559). Why not give eachother a call before the freeze?

One sad part of all this is that we have lost some members, several in Alaska for instance -- probably that old problem of frozen keyboards. We won't give help to non-

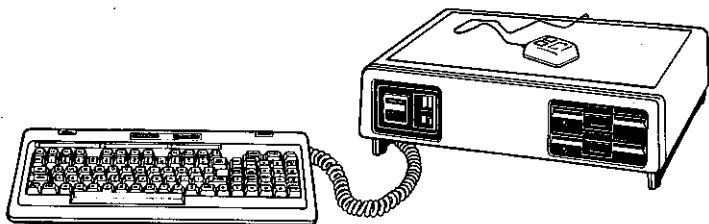
Orphans. So when you get a list of your nearest colleagues, it will be skipping some guy a block away from you, who put his 2000 in a closet and failed to renew with Orphans. 2.4 short pay, short time (W)

We always have a problem when membership price increases, with people who join or renew with a check for the old price -- even when our records show they have received information about the new price. I like to give a month or two of grace, but there are limits.

If you have made this mistake, I don't have time to write you about it and pry another \$3 out of you (if you paid \$15 of \$18). The simple solution: You bought 15/18 of a year's membership. That's 10 months out of 12, probably 5 issues instead of 6. The expiration date on your address label reflects any such \$15 payment for an \$18 subscription.

Many of you have had the sad experience of writing HQ a question and getting no answer. One man serving a thousand just hadn't oughta answer their letters (except in the Whimper, when justified). But we've been getting a new kind of request lately: "Please bill me." People ask for certain information, not knowing which Whimper or other service it's in. Well, I won't send your information and I won't bill you either, for these reasons:

1. The 1:1000 ratio compels cash transactions only.
2. I can never find a fact when I look through back Whimpers. They're an encyclopedia, but not in alphabetical order! (Do we have a volunteer to index all the Whimpers? I'd



love it, and distribute the index in tiny type as part of a Whimper.)

3. As with questions, the 1:1000 ratio won't let me do consulting and research for you, even if you offered top rates. You're damn lucky my wife allows me to do the Whimper, and she's none too nice about it. 2.5 renewal (W)

It costs \$18 to renew your membership (\$20 Canada and Mexico, \$30 all others), which includes all the Whimpers, approximately one per two months, cover-dated during the 365 days after your check slides from your envelope into the "to the bank" slot at headquarters. Of course, early renewals buy a full year starting on your expiration date. If you renew at the last minute near a Whimper date, your letter is likely to be piled unopened during the crush and you may lose that issue until you buy it as a back issue. Fair warning? Back issues cost \$5, in print or (Z)zerixed. Available back issues are March(Z), May(Z), August, October(Z) and December of 1987, February, April and June of 1988. We have requests for contents listings, but each issue covers "everything," so such a listing is hardly worth the space and not worth the time. We did, however, attempt such a contents listing in the February 1988 issue, page 5.

Your membership also includes the right to buy anything listed in the Souvenir Shop -- you'd be surprised how many non-members try to buy, and we refuse. You can, as a member, list things you want to sell in the Flee Market, and write in both questions and answers for the Whimper. You will be thanked (and often get requests) through your initials, printed in the Whimper.

The Deal of the Century

You get nice help from the Orphans, for a great computer, and things can't get better than that, right? No, things did get better than that, for three members. Ordinarily I ignore offers to buy and put offers to sell in the Flee Market, but one day three offers arrived that fit together so well that I couldn't ignore them.

JTS wrote in and asked me to advertise his PFS Report for \$25. That was on top of the pile.

A card from MF offered a fantastically loaded 2000HD for \$595, 896K Envision RAM, mouse, clock, graphics, VM1, 10meg drive, Framework, Lotus, dBaselll and "many extras."

It made me sick to think what I spent for all that stuff. I looked forward to putting it in the Whimper, and a letter from MF saying he got 850 phone calls.

Then out of the mail pile fell a survey from new member DAC, with a note explaining that he and his wife needed "a second 2000 and PFS report." It was a charming letter, and I always admire the couples that both compute on the 2000.

I made the phone calls, collect as usual, and I understand the triangular deal was consummated minutes later. I'm still sad about that giant among computers for \$595, which I didn't buy myself. I hate to skim goodies off the top and never have, but gee whiz, I'm not THAT ethical. I just didn't need it.

Hard Work, No Pay, Okay?

Headquarters is making no progress toward reviewing the public-domain programs that have come in. We still have only a fraction of what's out there, but it's blocking part of my desk without giving you Orphans access to it.

Would someone volunteer to do reviews of literally hundreds of small programs, which I would send you one disk (roughly fifty) at a time? You would have to pound out a review of a whole disk about once a week, mailing it to me to get your next disk. Required: promptness, dependability, computer skill for the problems that will arise, a wide range of interests, and total tolerance for whatever people put on disk, so you will fairly review all programs.

I might send you disks in archived form, which you would unpack yourself. This can get very annoying as the READ.ME files pile up, because the unpacker programs refuse to save more than one READ.ME per run, and often there are piles of them.

You also have to write interestingly, very briefly, and correctly, because I won't be able to edit you much. I'd like about one line of type (80 strokes) times the cube root of the size. That means that a review of a program 88938 bytes long might be 45 lines long, almost a page, while a 1152-byte program could get 10 lines. Of course, when a long program is dull and a short one is fascinating, you should adjust your sizes. Try for description mostly, with a touch of evaluation (how good or bad it is).

The project might take six weeks (six disks to review); your reviews should be sent on disk also, in straight ASKY preferably, or coded by MWord or WPerfect. Chances are, you'll take a full day and evening to review each diskful.

Your contribution would help every Orphan, because as soon as we can publish reviews, we can offer the programs to members with a reasonable way of helping them choose. souvenir shop

A Little Hand for Big Ed

3

It's a mere trickle, but compliments for Tandy stores keep flowing in. RWB sends us a reprint of his letter to the Wilmington store, complimenting two salesmen for consistent help to "a novice like me" during "four years of dealing there."

This one isn't exactly a compliment, but it's a request to face facts. SDC gives us this insight:

"Your comment about Tandy sales people not knowing about computers is true of all computer sales people everywhere. The stores want people who sell merchandise well, without wasting time learning how it operates or solving users' problems. As for technical support, most manufacturers concentrate the technically competent support in a single consulting office, serving only those who pay for that support."

SDC is exactly right. The unfortunate problem comes when a salesman, who knows very little, knowingly convinces a novice shopper that he knows very much. That's dishonesty, encouraged by commissions.

RWB says the computer center on Kirkwood in Wilmington has "been most helpful in obtaining parts and solving problems I brought to them."

Lubbock, Texas is the place to live for "support and knowledge" from Tandy, at South Plains Mall. "How fortunate we are here," says RMS.

Hardware Help

Most 2000 owners still aren't Orphans. That means that when there are only a hundred or two of certain items left, you can follow our hint and buy from Tandy, before other orphans (who aren't Orphans) know what hit them.

The most important such items are the backsliders, trays with add-in boards for the backslots of your 2000. All but one of the majors are still available from Tandy stores: hard-drive (\$350), graphics (\$300) (and color kit (\$100)), and mouse/clock board (\$100). (Note that the digit-mouse is extinct and no other mouse works on the 2000.)

Always call the franchises first, free-pricing Tandy stores with 800 numbers that advertise in PCM or PC Resource.

When you can't get something after a month of waiting for the "backorder" to fall off the tree, chances are that the tree is picked clean. Next, you try the discontinued-item dumping ground, National Parts, 817-870-5600 (always busy)(the store can call for you). Supposedly, NP has the hardboard and clockboard, so a regular store "backorder" might hang up forever.

NP also, reportedly, has the vanishing memory board, a steal even with its \$80 price boost to \$300. Tandy is allegedly passing on the memory inflation, but these little bitty chips came in from Mexico in 1984. More likely, they want you to skip the one board you'll need most later on. Envision still requires one of these, from you, as the floor for its 640K superboard.

One interesting place is the Outlet Store, a sort of Tandy factory store for Fort Worthers, 817-654-0337. But don't be surprised if they come up dry on 2000 items.

One item that should be in great demand, but isn't, is still available by store order: the repair manual for the 2000 itself. \$35. This 300-page gem was unearthed by CJ, who is willing to use it to answer member questions. But for now I'm not giving his phone out, because he probably doesn't know what it's like to get ten long phone calls a day. HQ has ordered one, and will send copies of individual chapters for a nominal fee.

But I urge every member to buy one now, before they run out. Eventually HQ will offer the 2000 diagnostic disk, but that only tells you what's broken, not how to fix it. Even if you're all thumbs, your corner computer repair shop will want to see your repair manual when you bring in an exotic bird like the 2000.

The Flap About Floppies

4

The combined wisdom of all members about floppy disks, tossed and seasoned by your fearless leader, is this:

The 2000 has little trouble reading and writing the special floppy Tandy sells for the 2000, numbered 26-410 in the box of 10. The quality has dropped in the past year, with something like three disks per hundred crashing on first use. Industry talk has it that Tandy is buying them from a no-name "offshore" outfit that doesn't even have a USA mail drop.

One snitch, working for a Tandy competitor, says the current supplier is a shifty guy who stamps out the plastic in a former shoe factory on tiny Isle of Man, a midnight-loading coolie-labor outpost allegedly controlled by England. This entrepreneur, who changes countries yearly, ships the disks to desperate Mexico, which funnels them uninspected into Texas to notoriously pennywise Tandy. All this dancing around is to get cheap labor while ducking taxes and import duties.

Quality aside, these 26-410 disks are so-called double-sided and quad-density (and unformatted, soft-sector, 96 tracks per inch). This seems to recall a dim day in 1980 when the IBM PC used a floppy that carried only 90,000 bytes (letters or numbers) on only one side. Then someone decided to put a second read-write head underneath the disk, hence double-sided (with 180K). Then they figured out how to pack twice as much stuff on each side, for 360K, and that's as far as IBM and its clones got. Tandy, however, went shopping for a floppy drive that redoubled the density, hence

"quad" density. This gave the 2000 (and no other important machine) 720K per floppy. Later, IBM's AT and its clones took the same quad-density read-write head, and made it read a wider stripe of the disk, for the "high" density version of 1600K. All Orphans checking this, report that the "high" density disks simply don't "work" (read, write) on the 2000, although they reportedly slip in and probably rotate.

Even after you (or Tandy) find a source for quad disks, you have a problem. Several members insist that hub rings and the 2000 hate each other, and Tandy has religiously kept hub rings off the various boatloads of 26-410's they have unloaded over the four years of the 2000. One or two members say it doesn't matter.

Some Floppies Do Flop

MOR, you sent some disks to HQ with hub-rings. They look fairly cheap also. And they don't read at all! I suggest you send your material again, on ringless quads despite their cost.

OR, you sent some of the same, with the same result: I can't run them. Please send the same material on decent disks. Sure, guys, some hub-ringed cheapos run on some 2000s, but some don't. Why play games of chance when near-certainty is a buck a shot?

One thing that does seem to matter is quality. But you can go 100 for 100 with a UPS armload of 35-cent cheapos with hub rings, and lose data without warning from two out of ten Tandy two-dollar 26-410's. Quality is where you find it, and not for long even there.

All this hints at a veiled threat: with the 2000 being the only machine in the world using the hubless quads, we might strangle if Tandy discontinued the 26-410. But the Orphans won't let that happen.

Here's your leader's current strategy: I have to put out about a disk a day for members ordering goodies, and at five bucks a snort, I feel you ought to get the alleged best disks in your packages. Once a year, Tandy disks go on sale -- in March, I think. I call a franchiser and improve on the sale prices, getting 100 disks for about \$120. (My favorite franchises are Big D, 800-367-2443; and Marymac, 800-231-3680. Never spend over \$10 in a Tandy store without calling a few Tandy franchises.)

In between, I buy on the open market, same as Tandy does for what they put their name on, and often from the same people who sell to Tandy. I have gone the route of cheapos and hub rings, and have had enough failures to suspect that a buck a disk is money well spent. My current supplier is TechMate, 800-247-3053. They can pry small special-order quantities out of Xidex, using the Dysan label, their best. Their less classy labels are StorageMaster and Precision. My contact at TechMate is Jim Hughes, a really sweet guy through all the grief and nagging I give him. They deal only with resellers (I qualify by sending you guys \$5 copies), but Hughes has just agreed to sell these vanishing hubless quads to any member who orders 100 (10 boxes) for \$1.012 a disk. No credit cards, just agree to pay the UPS man your check for \$101.20 plus \$2.20 COD fee plus UPS shipping, \$5 to \$10 depending on how far you are from Maryland. This counts as a sale to the Orphans, so he's not likely to charge you state tax. Their customers being resellers, state tax is seldom part of their picture. Anyone bounce a check on him, I'll put a rattlesnake in your mailbox.

I know it's tempting to ask Hughes for a box or two, but he's a wholesaler. If you bother him by whining about quantity, he'll stop selling to members.

We Have a Little Alternative

A 3.5-inch drive in the 2000? Not bad, if you don't mind that the disks cost a lot more. HS2 says he'd like to see someone get busy on that project, which is timely because DN of Envision Designs has done it. His new drive has its own on-board controller, so the 2000 thinks it's a floppy. To pull off the impersonation it has only a 720K capacity. It goes in either the A: (bottom) or B: slot; if you're upgrading a single-floppy 2000HD, you'll probably need to buy a double-outlet ribbon cable and slip it onto the motherboard without making any static. The rest is as simple as hooking up a hifi component. \$230.

When You Got It, Flaunt It

There's a silly trend going around which just makes you smile. New users of laser printers (there are no old users) seem to roll out their correspondence and written work in a 14-point size. This is funny because:

1. I do it.
2. Although beautiful, even lasers show a little jaggedness in their Z's and V's, and this jaggedness is less obvious in the larger type sizes.
3. Traditional typewriter big-type ("pica") is 12 points high (1/6 inch) including the between-lines white space; little-type "elite" is 10 points although still 12-point spaced with more "air." Now comes laser, and the proud owners seem to be saying loudly, in 14 points, "Hey looka me, I got a laser!"



4. Human eye lenses are pillow-soft until you're 30, focusing on far things with a circle of hammock-like muscles that flattens them. The muscles relax to let the lens fatten for sharp viewing as close as 5 inches. Beyond age 30 the lens gradually hardens, moving that minimum focusing distance out about 2 inches a year, until when you're 60 it's frozen at 65 inches. The people who make type-size decisions around the office are 40 or 50, and they choose 14 point because they can read it without everyone seeing them put on their reading glasses.

5. The really savvy guys know that written material is supposed to convince people; the people most worth convincing are 40 to 60 years old; 14 point type will please the readers and get the proposal approved.

Free, White and 2106

SHW asks, "How did you figure out what each pin did and connected to on the 2106? Where does one learn that stuff?" As any seasoned researcher will say, you dig around in piles of paper, at home if you're a pack rat, until your trained nose tells you this is pay dirt. I did that, scoring in the back of the 2106 hardware manual and in the beginning of the 2000 hardware manual. The meaning of the diagrams I found was fleshed out by my long talks with Westwood tech support, and by more in-house reading, from a dozen unnamed bits of paper.

Remember those warnings on camera film, do not load in direct sunlight? The same warning applies to the Orphan laser's photosensitive drum ("OPC unit" says TI, "kit A" says Tandy).

Tandy, for once, does something right by attaching a warning tag to their kit A. Texas Instruments stupidly puts a not-very prominent warning half way through their instructions.

Naturally, I blew it. Both warnings say you should get the photo-roller from its safe black clamshell to its final fitting inside the 2106, in less than five minutes of dim light. So I unwrapped everything and laid it out on a table in bright light, and then a phone call pulled me away for two hours. Sure enough, less than 1500 pages into the photo-drum's expected life, it started printing some gray lettering among the snappy blacks.

You need a toner cartridge every 1500 pages (\$20 to \$30), the photo drum I ruined every 10,000 (\$150 to \$200), and a cleaner kit every 5000 pages (\$70 to \$100). In Tandy terms, that's toner, kit A and kit B respectively. The toner cartridge refills easily with a pop-out plug, after you wash and dry it, and iron on the peeler-sealer. But Ricoh insists that nobody's toner but their own will work right. Are they right?

The photo roller picks up light from the flashing laser beam and keeps it as static. Its static then attracts black dust from the toner cartridge, which is rolled off onto the advancing paper. The slightly dusty roller then slides by a couple of high-voltage static wires that pull off the extra dust

and drop it in a bin. This "cleaner" bin has to be pulled out when it's full of dust. Meanwhile, the dust-spattered paper is pulled under a hot (300F) roller pressing down very hard, which melts the loose carbon dust onto the paper. I'm skipping some of the mechanics, but that's the basic principle of how our laser (and the zerox family) works.

I was able to improve quality considerably by tooling the corona wire (see manual) and hissing around the guts with one of those tiny \$20 flashlight-size vacuums. But more was needed.

Desperate to get out a Whimper, I had to blow \$200 for a new photo-roller, which luckily was in stock at my local Tandy.

Tandy? You thought the Orphans had endorsed a Texas Instruments printer, but in fact we endorsed a Ricoh printer, which TI enhanced with PostScript and other electronics. The same dumb Ricoh engine is used by many makers, one of them Tandy. All the regular supplies sold by Tandy for their laser fit the 2106, and probably most of the mechanical parts if they ever break down. So your local Shack (or better, a franchise) is a good source for supplies. I find Big D (800-367-2443) very inexpensive for laser supplies.

Besides the Tandy LP1000, other printers using the Ricoh engine are IBM (theirs is a bit disguised), Okidata L6, Epson GQ3500, Destiny LA1, Shamrock (probably retailing the Destiny), General Computer PLP, Ricoh 6000, PCPI LI1000, and Acer LP75. Spare parts from any of them should fit our TI 2106. If you do work that must be on time and have a technical touch, it would pay you to buy a cheap version, like the Shamrock for \$1300, and keep it in a box ready to give instant replacements to your cannibal mechanic. Then you can replace the replacement at leisure.

The Pause That Reboots

5

There's something strange about the 2000 (maybe all PC's) when it crashes. For some reason, it heals itself if you leave it turned off for a minute or two.

You're working along in a new program and suddenly the screen goes black, with maybe a blinking underline at the left side. The keyboard does not help. You have crashed.

Tradition has it that you should try a warm boot, meaning re-start your DOS disk with the 2000 still turned on. The warmest boot, call it a hot foot, is pressing the control, alt and delete buttons at the same time. This works 50% of the time. That failing, you get another 25% success by hitting the black button on the front of your 2000, call it the lukewarm boot.

The remaining 25% of crashes require the cold boot, which is turn the machine off (red button) and back on. But as your leader, CLD, and several other members have discovered, the last 10% of crashes don't even recover with the cold boot! And yet, software can't injure hardware. A cold boot ALWAYS succeeds.

Why the discrepancy? Some cold boots have to be FRIGID. You do the frigid boot by turning your machine off, chatting with a friend or reading something that's been on top of your pile for a week, and then, after ten minutes, turning your 2000 on again. Your machine gives you a cheery good morning and pretends that nothing even went wrong.

So when you crash, write down the keystrokes that set off the bomb (read some manuals later). Then, in order, try the hot foot, the lukewarm boot, the cold boot, and the eskimo boot. After the most gory crashes, two or three eskimo boots will succeed. If the machine still won't start right, your "booting disk" is broken down.

In this awful case, you do the hibernation boot. You'll have to build another disk like your regular DOS disk, the same way you built this one, starting the 2000 with your Tandy DOS 2.11.03 disk WITH its write-protect tab stuck on the notch. Certain boards, like the cartridge controller or Envision's super-memories, crash the 2000 if ordinary DOS.03 is used to boot. To get around them, slide them out half an inch to disconnect them, and once the computer is humming, do the tricks to your new booting disk that come in the manuals for those boards. Then turn the 2000 off, plug the boards back in, and do the eskimo boot.

Why do we call it a boot? Because in those popular games, American football and European football (soccer), the "boot" is how you start the game.

Okay Guys, the SILLY* Season Has Come *(Software Inventory Long List Yearly)

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 WordPerfect 4.2 \$445 W.Perf.Cor.-Ty 90-0100
 WordStar 4 MicroPro
 WPTC-Connect \$200 Sigea Systems
 WS33X.PAT PCS-29 DL2
 Xenix \$6 Syst.5 1 \$195 Ventura--Ty 90-0307
 XTree \$50 Executive Systems
 Zyindex - ZyLab 145standard 295pro 695plus

On the Trail of the Grail

PAE has asked, creatively, why Envision or someone can't create a slide-in board that impersonates an IBM clone, meaning that it senses when a program is trying to write directly to screen memory or some other address where the 2000 is different. This board would then slam "call forwarding" on the message and send it to the proper 2000 location. This would be the famous 2000 Holy Grail, IBM compatibility. Sorry, PAE, but those boards in the back of our machine are only reached by what your company operator calls an "outside call." When a naughty program writes directly to the screen, the message whips through the 186 chip and goes directly to a magnetized particle in a nearby black memory chip, with no chance for an "outside" board to transfer the message or even listen to it. The puzzled particle does nothing, because it's not connected to the screen on the 2000. The screen stays blank, because all the other messages to the IBM screen are also going astray in the 2000. Close but no cigar, PAE.

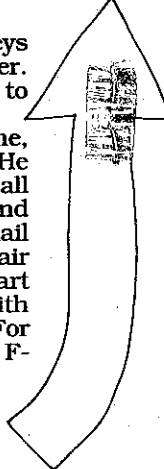
6

You guys recall the skinny flipchart for function keys that we laid out last December on page 7 of the Whimper. Every one of you wants one, but you're too lazy (or smart) to blow several hours of runaround to make one.

One of our members is more ambitious than you or me, and has a binder-puncher machine (they cost \$550). He doesn't seem profit-minded, and says he's willing to put it all together and mail it to you complete for four dollars and change. I want him to have a few cents for his labor, so mail a \$5 check to Jack Doerr, 22407 Bayview Drive, St.Clair Shores, MI 48081. Specify whether you want your flipchart on white card stock with a blue binder strip, or off-white with a brown binder; or he will choose if you don't specify. For anyone with more than one piece of software that uses the F-keys (even our Basic does), it's a steal.

506 Ways to Work Your 2000

There it is, our list of 506 programs runnable on the 2000, which should keep you computing for a while more. Despite our intention to update earlier, it was a year between



lists, so it apparently is becoming a yearly item. That's probably how Bert Parks felt, after trying to run Miss America once a month.

This list is supposed to contain every program that any Orphan has been able to run on his 2000, plus those reviewed by magazines as allegedly 2000-compatible. Of course, it is incomplete. If you guys send in items (name, price, manufacturer) I will run an addendum in every issue. We added 156 programs this time, thanks to your tips. One notable gap is games. I've already noticed (too late) the absence of Flight Simulator, and the Infocom series of sci-fi and detective fiction that you rewrite while reading it and being the main character.

You will note that we have included some public domain software, available from BBS's by modem (and I hope soon through Orphan mailings). There are a thousand such programs, and we ask that only "important" large programs be put on our list. It really helps if you send copies of any public-domain or shareware (free or optional-pay) programs you are adding to our list. We are depending on the 10% of members who are modem users, for this listing and copying.

Go shopping right here; compute in the best of health!

Hang Ten on a Mathboard

7

Two members asked why we must spend an extra fifty dollars for the 8087-1, which operates at 10mhz, when the 8087-2 operates at 8mhz, the same speed as the 2000.

Nechodom of Envision answers: The 80186 chip in our 2000 has a clock in it which turns the electricity to the rest of the chip on and off every 125 nanoseconds, meaning 8 million times a second. It leaves the juice on for just half that time, 62.5 nanoseconds.

The 8087-2, for which you'll pay \$125, can use that power from the 80186 once every 125 nanoseconds, but greedily drinks the 5-volt juice for 84 of those nanoseconds. Since the 80186 is turning the juice off early, the 8087-2 refuses to cooperate. Enter the 8087-1, which is willing to hum along at 10mhz, faster than the 2000 requires. But being quicker, it finishes its power-on cycle quicker, just barely within the 62.5 nanoseconds the 2000 provides. It's like keeping a doberman to discourage burglars. He never has to run full speed, but his bite is quick.

Hard Drive, Hard Choice

We've had many requests for a clear idea of what hard drives work in the 2000. Other requests, less frequent, are for good price sources and the maximum capacity of the 2000 hard-drive bay. Your answers:

The 2000's hard-drive board uses only the plain-vanilla coding called "MFM" (modified frequency modulation) to store data. You can forget about the higher-compression coding called SCSI, RLL or Perstor. When you order a hard drive, always specify MFM encoding. RWB didn't, and was very disappointed when his 30meg ST238 formatted only 20 megs. The 238 is an RLL-controlled version of the MFM 225. Don't be fooled by the higher capacity numbers on non-MFM drives, and don't bother desiring them, because we can't use them and none of our hardware specialists will undertake the huge job of making a controller for them. In the two commonest brands, the MFM drives (with capacity in megabytes) are Seagate 225(20), 251(40), 251-1(40), 4096(80), MiniScribe 3650(40), 3053(44), and 6085(70). There are others.

Never buy the hard-drive "kit", which is a "bare" hard drive (often with some mounting hardware) PLUS a controller board worth about \$40 that doesn't fit in the 2000. Even though the "bare" drive lacks cables and instructions and a disk of "partitioning software," buy it "bare."

Break Up Your New Toy

The "partitioning" disk won't work on the 2000 anyway, but the 200 shares with IBM clones the inability to format a hard drive of more than 32 megabytes. So you do need partitioning software, and as usual, an ingenious Orphan has it. Member RCS sells "MLFormat" for about \$40 (my notes are inaccessible), from MicroLink Software, 800-334-9612. This is the disk that member DWN uses at Envision Designs in his drive kits.

After a bigger-than-30-meg drive is physically in the box, you fire up the machine (with a DOS disk in drive A). Then you switch to the MLFormat disk and use it (rather than the old HFormat in DOS) to format the new hard disk.

MLFormat doesn't really format a "drive" (all or part of a physical hard drive) bigger than 32 megs, because old DOS would still be unable to use it all. The trick of MLFormat is to break up the physical hard drive (which often has many hard disks hidden inside like a stack of pancakes). MLFormat will, at your request, create (for instance) from a 40-meg drive a C: drive of 30 megabytes and a D: drive of 10 megabytes. The 2000 will think it's talking to two separate drives, even though all the conversation is going through one cable-pair.

You can't make a hard drive work in your 2000 unless you have an interpreter to talk its language (the hard-drive board that slides in back), plus a device to feed it the special power it needs -- the hard-drive power supply, an electronic roof that replaces the plain-aluminum power-supply cap inside the double-floppy 2000). You also need the power cable, but that comes with the HD power roof. In a case where you install two separate half-height hard drives, you need a "Y" cable so power will feed out from the single Tandy power cable to both drives.

Don't worry about overloading the power supply with one big or two medium new drives. The new drives run so gently, on ten or fifteen watts, that the Tandy guts get a feeling of relief from losing that old thirty-watt drive the original HD's contained.

Instructions for crawling into the 2000 and cramming in a hard drive are in the October 1987 issue.

How to find the best prices? Rule 1 is, don't buy until you've read every hard-drive ad in one current copy of PC, PCWorld, and ComputerShopper. Don't worry, you get very fast at it after a bit: I do a thousand pages an hour when checking just several items for sale.

A new feature on the horizon: the market is shifting fast to half-height drives over 40 megs, so the full-height 70s and the half-height 20-30-40s are sliding in price. Another new feature is that Seagate apparently miscalculated production and has been closing factories on some days. They have had a big summer sale on, which seems likely to stretch uncharacteristically into the fall. Check their prices especially.

Rule 2 is, keep looking for jokes. Lots of splashy ads offer you the Seagate 4096 for \$695, but your leader is buying it (as the private DR) for \$550. My source is a hard-driving outfit called Hard Drives International, 800-234-3475. Two other outfits have recently matched their 4096 price, but only HDI is consistently low on all the Seagates and MiniScribes.

Once you have limited yourself to MFM drives only, with no "kit," you can use any full-height drive, since that size just exactly fills the hard-drive garage in the 2000. I do mean "exactly" -- there's not enough room for a sheet of paper left over! You can also use either one or (with added cables) two half-height drives, which also exactly fit the 2000's bay.

The problem is, however, that if you buy too much capacity, it will be wasted in your 2000. Don't plan on using that excess capacity in a later computer, because by the time you forsake your 2000, we may have the laser "gigafloppy" the Whimper predicted in May 1987.

So, what is the maximum electronic capacity that the 2000 can use? Just this:

***The 2000 can use* (*use as many as, but no more than) two hard disk drives, internal or external to the box;

***Each hard drive can use* 8 heads. A head is a fingerlike pointer that touches a disk like a phonograph needle, either on its top or bottom (or side if your computer rides on a vertical floor stand). So think of a stack of four spinning pancakes inside a steel box, each being almost touched by two movable pointers that look like chopsticks holding a pancake.

No heads could be held close enough, mechanically, unless the drive cost \$50,000, but an elegant idea puts little airplane wings on each head, which ride on the hair-thin friction wind at the surface of the spinning platters.

***Each side of each platter can use* 1024 tracks, much like the grooves in a phonograph or laser disk. Because the outermost tracks are each called track 0 (and the innermost 1024), each stack of eight tracks is called a cylinder. This concept is useful because all eight chopsticks (heads) move in unison, so they consult all eight track 0's at the same time, the whole thing called cylinder 0. So when you talk with the hard drive salesman, ask for up to 1024 cylinders.

***When you have the full 8 heads and the full 1024 cylinders in a drive, that drive can be formatted (with MLFormat) into three or more so-called "drives" totaling 71.3 megabytes, each "drive" being up to 32 megabytes.

***When you have all that capacity in each of two half-height drives, such as the recently available MiniScribe 3085, your 2000 reaches its maximum hard-drive capacity of 142.6 megabytes. Extra capacity hurts nothing but is wasted.

That's what you can pack into your 2000's hard-drive compartment, and that's a lot. Expect to pay \$10 a megabyte. Count up all your present and soon-to-get programs, and add on all the words and numbers you might be storing in your work; then double the number. How many megabytes is that? Buy only as much as you think you might need. Paying for empty megabytes is throwing money into the street.

Lemon Aid

8

Repairs can be a pain, especially when they fail. Expensive, too. KCA has a valuable suggestion for things that are giving you grief: buy a service contract on that particular item (even separate controller boards), for roughly 10% of retail price. One repair usually costs 20% or more. Then, "the sporting thing to do is to wait until you get your contract in the mail, before you take it in for the contract fix." For all I know, the contract has fine print about "preexisting malfunctions," but if so, they'll have an impossible job proving when the thing broke.

We have had about a dozen members send us amazing tales of the breakdowns of their (only) 2000. The only consolation I can give you is to tell you that it's not the 2000 in general that is bad: it is just the 1% that are lemons. Of course every machine in the world breaks down eventually, so even the other 99% of us are wise to store a spare 2000 if the price is right.

The latest wail of woe is from JRW: "I find a lot of good stuff in the Whimper, but have some reservations about

whether the 2000 is the great machine you keep telling me it is. My machine has been in Tandy's repair facility eleven times in four years. (No independent repair place, we have many here, will handle Tandy.) It averages over a week per repair, three weeks a year."

He gives a list of things that went wrong, and that list reads like the mod list: things that went wrong with every 2000 until the FREE modifications were done on ONE trip to Tandy repair. This gives you lemon-victims a major clue, even if JRW's repairman comes up clean:

It usually is the repairman who is a lemon, not the 2000 that keeps hitting his bench. Often he's just ignorant, and too lazy to read the tech bulletins if they even came and his shop saved them. Often, also, he's greedy. They claim that it's a straight-money operation, but common sense tells us that a shop that makes bigger money is more popular with the store manager out front and also with the regional bosses. Popularity means steady employment, good raises, and not having to take too much crap from management. Then they sit back there unsupervised with the radio up loud, the window open, talking about girls while they slowly work through their piled-up repair jobs. It's heaven, if you just avoid doing foolish things like curing lemons by the book in one hour.

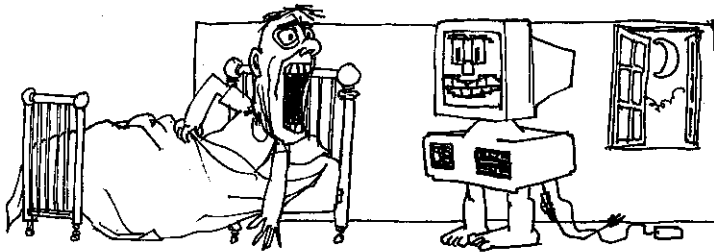
Of course, repairmen will tell you they are the best in all of Tandy, and mods are sixty-five bucks plus parts. Baloney.

Night of the Living Dead

An even more gruesome horror story comes from CDT, who put it all in 18 numbered paragraphs in Charlie Chan dialect. Solly CDT, space in Whimper too short for whole story.

Silly CDT, he thought he could run Framework in a double-floppy 2000. He apparently made a very minor mistake, trying to run it with less than 384K memory.

The machine should have said "give me 384K" and popped back to his A: prompt, but it didn't. It wiped out his FW disk and his drive A: chewed itself to bits. Then Tandy sales and Tandy repair got into the story, and things really got bad. They kept telling him everything is fine, go home and plug it all in.



To make a long, horrible story short and horrible, Tandy repair and sales supplied him with a total of eleven floppy drives for his A: and B: slots before the machine finally worked, at least for now. He's running scared, can you blame him? During all this he chewed his way through three or four copies of Framework, all after the nice men in the pretty store told him go home, get out of the way of our cash customers, plug it in.

Through all this torture, Shack and Tandy people kept losing CDT's software and hardware and forgetting that he needed it. His phone bill ballooned. And finally, one day, "I charged into the district manager's own computer center astride a horse with a twenty-foot lance leveled at said district manager, who was talking to his Fort Worth boss at the moment the first five feet of the lance went through the wall next to the phone." (Forgive the rewrite, CDT.) Finally Tandy seemed to notice CDT, and threw all available Frameworks and new drives at him, no charge.

CDT, if you have not availed yourself of the copy-free Framework listed in our Souvenir Shop, you can have it now, on the house. When you get it, make half a dozen copies on proper disks (see disk story, this issue, for details). Put write-protect stickers on all the notches of your original and our copied FW disks. And do enough inquiring to find the nearest Tandy repair place that is NOT the one you've been using. Go there next time. As for Tandy stores, stay out of them.

Keyboard hunters, WGW has found a way to adapt the keyboard still sold for the Tandy 1000 to the 2000. Possibly, his discovery is a key to using all the keyboards on the market!

He chops off the 8 pin din plug (does he mean 9?) at the computer end of the 1000 keyboard, stripping back to find six colored wires. He buys a Shack 5-pin-din plug, their number 274-003, and connects white to pin 1 (data), yellow to 2 (busy), black to 3 (ground), green to 4 (clock), red to 5 (+5v power), blue sealed off (keyboard reset for the 1000). Doing this surgery on an extension cable enables the keyboard to serve a 2000 and a 1000 alternately, but we don't talk dirty in the Whimper, and 1000 is a bad word here.

Would one of you with an hour to spare please buy a Northgate keyboard and fool around with its plug to see if we Orphans can crash the open keyboard market? I tried hooking various keyboards up in a compatible store, but the 2000 didn't hear my typing at all.

Big Motor in Little Car

9

Envision Designs, 1539 W. Pearl St., Pasco, WA 99301, 509-547-1139, has announced a new way of formatting hard drives for the 2000, using our special DOS, which doubles the speed of hard drive read and write operations. By cutting 50% off the drive operations, the "Faze/IV" program reduces the time taken by any program that uses a hard disk, usually by 10% to 30%. The more often a program uses the hard drive, the more time Faze/IV saves. By the way, both of our most productive hardware helpers, Envision and MicroLink, could use the help of a marketing specialist in choosing names that best describe and excite. I renamed MicroLink's "Locate" to "MouseTrap," but I can't improve the selling power of the name "Faze/IV" until I try and enjoy it. Marketing aside, both of these guys are fantastic inventors.

A production copy of Faze/IV is at Orphan HQ, but we will not be reviewing it until our latest souped-up 2000 gets assembled. Its hard drive (Seagate 4096) is still floating on the Arizona version of UPS. At the same time, we will review other enhancements, like the true-memory eproms from MicroLink, MLFormat also from MicroLink, and an 896K motherboard with 8087 from Envision. All told, if the darn thing doesn't explode when turned on, it should be one fearsome computer. Stay tuned.

This could be a big help in patching "compatible" programs to run on the 2000. WMK has found a way in:

"After searching for years for the address of the 2000's text screen memory (not graphics at E000, April Whimper), I finally stumbled across it. Unlike the PC, the 2000 has text screen memory separate from graphics. The address, on my 640 color machine with VM-1, is 9EBF:0010. Why the odd offset, I have no idea."

[We don't either. The designer of the 2000 offered to join the Orphans, but never returned his survey. I hope he liked his free issue.]

WMK suggests that you change the address by 1000(hex) for each 128K away from his 640, such as for a 512K 2000, try 8EBF:0010. If you stumble, try chipping yourself to exactly 640K and start where he left off.

Your leader can't do this search because (a) he's too dumb, and (b) running the Orphans already wipes out his time.

In that address (9EBF:0010 for WMK), you find a byte, two hex digits that could be anything from 00 (our zero) through FF (255). Since the capital letter N is ascii hex code 4E, if the lower left* character on your screen is an N, you'll find a "4E" temporarily stored in 0010. (*For all I know, they might start at upper left.)

How do you want that one letter displayed? The 2000 checks that information in the very next box, memory location 9EBF:0011. If you want the plain-jane version, the byte says 08. If you want it extra bright and underlined, the code is 58. The fanciest N of all is reversed to a dark N on a bright rectangle, extra bright, underlined, and also blinking. Its code is F8. The meaning of all the 8's is, "show it." Replacing the 8 with a C makes the character invisible.

HOL asks whether he can run a tape drive off the Tandy disk cartridge or hard drive controller. No way, HOLse. Those controller boards do just what their names say, and grudgingly. Our hardware honcho at Envision was talking about adapting a tape drive with on-board controller into the B: slot, but he hasn't mentioned it lately. A guy can only do so much. And member DAS (April, p.6) has been pushing on tape drive manufacturers to see if they can adapt.

The 2000 In Its Prime

10

The Tandy 2000 is faster than the PC, but how much faster? RCP has dug up a prime number generator that finds every prime from 3 (it skips 1 and 2 for speed) through 16381, that's four pages of numbers. His source measured the IBM PC doing it in 8 seconds, which is not shabby. The 2000 does it in 0.4 seconds, which is twenty times as fast! The 2000 knocks more than seven seconds off the PC's time; you can get another third of a second off if you invest in five million dollars worth of IBM 3033 mainframe, which does the job in .0078 seconds, 50 times as fast as the 2000.

RCP has sent in a disk with the program, which I'll send out to any member for the usual \$5 fee. It's not in the Souvenir Shop because it appeals only to our technicians and math types. The disk has several versions of the program: the assembly language version timed above, the Basic version which is a lot slower (the 2000 was still twice as fast as the PC), and the printer version of both languages, which is slower still, governed by the speed of your printer.

Software Support

Several previous issues have given clues to locating generic compatible software that runs on the 2000, but nothing beats trying it on your own 2000. As our review of Egghead last February hinted, this is the place that can help you.

Of course their prices, while discounted, are not as good as the magazine-ad marketers, but you've got to treat your local Egghead fairly. Try to buy from them frequently, if you're trying stuff that crashes on the 2000 and returning it to them.

As far as I know, their returns policy is based on eyeballs and feelings, so you get "persona grata" status even if your purchases are small ones. When you find a \$500 or \$1000 program from them that runs, it's probably ethical and definitely economical to return it, and phone-order it from a magazine with an extra \$100 off the price. But don't chisel: keep the under-\$500 stuff you bought at Egghead, if it runs.

It's In Here Somewhere

Your magazine-addicted leader and many of you have been watching a new flood of software that you might call "Son of Deskmate." All the way from Tornado to Hypertext, the new style seems to be this:

Never mind filling your computer screen with useful work, like your inventory list or your term paper. Take your entire cluttered desk and recreate its chaos in that little foot-square window above your keyboard!

Part of the attraction of this is milked from the long-dormant dream of a paperless office, just a lovely computer on a bare desk, a faulty prediction we all heard in the 1970's.

Another advantage is that the messy desktop on screen is, allegedly, no longer messy and instantly easier to work with. This illusion is based on making every scribbled envelope back and scrawled letter-margin a colored rectangle, its edges perfectly parallel to every other scrap of electronic paper. Not messy! Then, shout the ads, any information in your world is flashed to the top of a pile with a keystroke or two. The first name of that brunette who gave you a willing look weeks ago, your most recent stock market hunch, the maiden name of Shakespeare's second wife, yes EVERY SINGLE THING YOU COULD EVER WANT TO KNOW, as Ed McMahon would say to Johnny Carson, is within a keystroke of your little toy screen.

Not quite, Johnny would say, and so do I.

First, your wood desk will stay messy, no matter how much clutter you are able to create on your electronic desk.

One of Parkinson's laws states that clutter will expand to fill all flat space within reach.

Second, whatever you need to know will resist your efforts to find it, because you'll give it the wrong clue -- just a misspelling or bad digit, but the information will often stay in hiding until you mechanically search the entire mess that you've stored.

Third, the most important stuff will never make it to the electronic desk, which remembers only the tidbits you type in. If you are so organized that you type your way through every phone call, everything you read, all your random thoughts, then you don't need a desk at all. You're Superman.

Fourth, a desk is three-dimensional and touchable, just like the computer screen of the year 2100 A.D. Why not use this great future technology today? Use a desk as your desk! When you want to find some lurking fact, you don't have to play riddle games with a keyboard. You can search for it not only by what pile it's in, but by size, paper color, ink color, feel, texture, thickness, stiffness, position, what's near it, what's on top of it, and just hunches you can't identify.

Fifth, a real desk is like the thrill you got when you graduated from hit-the-arrows computer games. With that big joystick in hand, it was all easier, quicker, more satisfying. If the ultimate computer is one which reponds directly to your hidden thoughts, then isn't your two-handed poking and groping more advanced than mechanically typing clues on a keyboard?

The only thing hyper about Hypertext, and the most powerful thing about Tornado, is the sales pitch we're hearing. They are toys, not tools.



"And clean up that damn computer screen, too!"

HQ hasn't even received its review copy of WordPerfect 5, but BCT reports that to run it on the 2000, you have to type WP/NC instead of just WP. This turns off a cursor control of WP5 which is just a crashing problem for the 2000. Also, it seems that all you get is 640x200 graphics, not as good as we had hoped. BCT says he is working on a driver patch to milk our 640x400 out of the program. As for printing from WP5, BCT disagrees with GJK and says you can't print using a selection of PRN in the WordPerfect printer control menu. BCT printed his letter using the 2000's shift-print-keys switch, which dumps the whole screen on a page. The result, predictably, has a status line at the bottom of the letter, "Doc 1 Pg 1" and so on.

Turbo Pascal on the 2000? JWC asked and BJK answers, that version 4 is an open question, but version 3 works fine with a patch that we offer in this issue's Souvenir Shop.

To my surprise, several members including CC2 and WMK have written asking for a set of patches by member JNW. They point out that a hidden use for the patches is in researching ways to make other software behave on the 2000. These patches modify a calculator program of great length which was provided in the March 29, 1988 PC magazine, so that it will run on the 2000.

With my usual efficiency, I have failed to ask JNW to provide the patches, so I ask those members who want to adapt the calculator program to contact JNW -- James N. Wells, Rt. 3 Box 335, Petersburg, VA 23803, 804-733-4472.

DBXL's Diamond Release, their fancy way of saying version 1.2, has caused members a lot of headaches that 1.1 did not. I have not yet had time to plug in my review copy of 1.2, and am happily databasing you all with 1.1. For now, that review is on hold, pending resolution of the detailed, helpful complaints which members LAM and SE independently sent to WordTech, zeroxed to Orphan HQ. WordTech (getting the usual mentioned-company copy),

would you get your act together so I can tell the Orphans about what sounds like it would be a great product for us?

WordStar 4 has been giving members trouble with Tandy printers. Alert PRK got busy on it. Unknown to many of the MicroPro reps (their phone support is weak), there is a special version of WS4 just for people using Tandy printers. Just ask for the Tandy-printers program and installation disks (two disks). Do it soon: with Release 5 now out, their support for 4 may get even weaker. If you prefer, it's in the souvenir shop for \$5.

Trig functions "built in" on our machine are not very precise, says PAE, who offers for \$5 a disk which makes double-precision log, exp, sin, cos and tan functions in a Basic program for curve fitting with Gauss eliminations. (Gee, I hope you guys understand that.) Call Paul, 602-837-8872.

The Alps Hip-Pocket Helpers have been complimented by SE and half a dozen other members, and one even sent me a copy to review, but Alps themselves have not answered my request for a review copy, so I'll be taking a while to get around to the review. Any volunteers?

The environment space patch that CAN provided and we sell in the souvenir shop has a couple of errors, ABF reports. In the first paragraph, debug.exe should have been called debug.com. And ABF says, "Set MOV BX,30 -- if you don't, your autoexec.bat file will not be executed!" I presume he means to change the listed 40 to a 30, rather than add a line, but I could be wrong.

Yes, RCP, I have written a note to Fogg about getting video memory addresses for possible compatibility patches. Yours is an interesting idea.

For Lotus123, what is the best bookstore manual? SHW wants to know, and so do I. Give a capsule review of it and (in general) its competitors, if you answer.

Who knows, among you sly accountants, of a tax return maker that runs on the 2000 and does a good job? MAM asks. We had one professional with a good one, but it cost him thousands and he was unwilling to negotiate with his supplier for an Orphans group purchase. Who can find us such a program, for low price or less?

PFS:Write refuses to call up NewWorld Speller from inside PFS, and HN wants a patch if anyone has it. He tried buying a combined word processor and speller, NewWorld 1.05, but it crashes on the 2000 (contrary to a review). What program will do the job, he asks. My answer is that all the majors do it -- MSWord 3.2, WStar 4, and WPerfect 4.2 run on the 2000. As for the minors, those that cost under \$100 instead of over \$200, I don't know that crowd well at all. Who knows the inexpensive programs that will fill HN's requirement?

The SubLogic scenery disks for Flight Simulator don't run on the 2000, says JEG. Can anyone help him? I love Simulator, the 2000 version, but it's a pain to do all my flying out of Chicago.

Just Basic Insecticide

11

WMK has broken through the bug in our new Basic that shows us a blank screen, so we can't see the instruction we're typing. You type in this line on the drive that has your Basic: PATCH BASIC.EXE, 61EA, 7803, B009.

"Now when I run Basic, it comes up in screen 0,0,0 and displays the appropriate copyright and version message. I'm not exactly sure why it works. In the unpatched version here, BIOS is told to set the screen to 80x25 color text mode; my change calls for 640x400 black-and-white graphics, but it comes up in b/w text, which I wanted. Why? Beats me, but it works."

WMK has 640K on Tandy boards, graphics with color chips, and VM-1. Those with different setups might try changing the last digit to any number 0 through 8, such as B004.

He also reports that "key trapping has been eliminated for F11 and F12, and the arrow keys have been reassigned the numbers 11 through 14." WHB finds that when certain Basic routines, such as Monopoly by member DP2, fail on the new Basic, you just load them on a disk with the older Basic, and everything comes up roses. The new Basic wouldn't even let WHB roll the Monopoly dice!

Members Review

MAM sends us his reviews of three programs he likes that run on his 2000:

PC Boss is a directory program that lets you take the usual actions (run, copy, move, delete, et cetera) on multiple files at the same time. You can select one or a dozen files for the same action. It has a readme tool built in, which prints nicely formatted instruction manuals from those pesky read.me files. It improves on the DOS "type" command, and is far better than DOS at jumping around the subdirectory jungle on a C: disk. We can't find an owner so it's in the Souvenir Shop.

SuperUtility edits disks much as the Norton crowd does, but with a refreshingly different display and method. It does some good tricks with hard disk formatting. \$89 or \$49 (sale price last year) from Powersoft, 214-733-4475, 17060 Dallas Pkwy. Suite 114, Dallas 75248.

Remotedisk transfers files from a Tandy 100 miniportable to the 2000, so you can write or gather data on the road. It comes in a disk version (Disk+, \$60) or a plug-in ROM (\$150), but with the program (26-3839), you must specify the Tandy patch disk for use with the 2000, #700-3403 (no charge).

POSTMASTER: Send address changes to the WHIMPER, 387 Main St., Westport CT 06880. The WHIMPER is published by the Tandy 2000 Orphans, address above, for \$18 yearly. Second-class postage paid at Westport, CT. Application to mail at second-class rates pending at Westport, CT.

Disks from HQ

Those ordering the Orphans' copy-free versions of dBIII, 123 and Framework, be sure to notify us if you have the Envision memory8 expansion. You will be sent a slightly different version. Even if you do get the wrong version, you can use the disk by doing some careful cross-copying with your DOS disk, but it's easier to start right. We got a note from RW2 that his copy-free 123 loads a year of records through September and then whines about "memory full." It sounds like you got the plain-DOS version, RW2. Check the read-me file and see if it helps you.

We don't want Tandy nailing us for copyright infringement, so you must send us your original program disk from each software package you want copy-freed. We will set it aside and compdupe you a copy-free version, sending both disks back to you.

Disk Pricing: certain disks are sold at a fixed price, like MouseTrap and WindowsPatch and copy-free versions of your major programs, but the growing group of public-domain files come to you at a basic \$5 for the first one you order, plus \$1 for each additional file that you order which fits on the same disk. That \$1 will drop to maybe 25 cents when we get a huge list of public-domain files from which you can order ten to fifty on a disk, but for now it's \$1.

The Souvenir Shop

1. Tandy-written Windows Driver disk, formerly their #7002611 and presently our #1, \$20.07 postpaid continental US, others inquire. This disk slyly erases drivers for non-Tandy printers, but we'll add instructions for avoiding this trap. (198K)

2. "Creative Byting," a free-to-copy disk on how to write user-friendly well-selling software, put out by an apparently out-of-business disk publisher. (183K) \$5.00 PPCUS, \$1.00 if added to #1 above.

3. "Suitcase," a hard-disk packing-up utility which parks the heads on the last sector (least likely to have data). This to protect data when you bump your computer while trying to lower it into one of those open-pit car trunks. The disk unpacks itself next time you turn the machine on. (2K) \$5.00

PPCUS, \$1.00 if added to #1 above.

4. "Mastering the Tandy 2000," a compressed zerox of an out-of-print book mentioned in the February issue. Reprinted with paid permission. \$6.50, postpaid conUS.

5. Unprotected Lotus123. Send your program disk from Tandy 26-5300 with \$5.09 and I'll send it back with an unprotected 123.exe file that copies to any disk any time. No other goodies on this disk.

6. Unprotected Framework. Send disk 1 or 2 of Tandy 26-5320 with \$5.03 and I'll send it back with an added, unprotected fw.exe file that copies to any disk any time. No other goodies on this disk.

7. Unprotected dBaseIII. Send disk 1 or 2 of Tandy 26-5353 with \$5.11 and I'll send it back with an added, unprotected dbase.exe file that copies to any disk any time. No other goodies on this disk.

8. A patch, on disk, to allow Symphony to run from a hard drive without the hassle of a Symphony floppy in A:. See "Disk Pricing" above.

9. Instructions for putting 512K (or more) on a Tandy 2000 memory board. 7 pages zeroxed, \$2.00 including postage, a price increase because it's such a big copying job.

10. List of Tandy 2000 video ports. 3 pages zeroxed, \$1.00 including postage.



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11. Mousetrap, which lets our digi-mouse run the arrow keys, the ENTER key and the F1 key, in your starting DOS or any software that lacks its own mouse driver, which means that now our mouse goes everywhere. \$20.19, of which \$10 goes to the deserving inventor, \$5 to actual costs of getting it to you, and \$5.19 to the Orphan phone bill.

12. Modifying a Tandy VM-3 to work with the 2000, by MOR, zeroxed. \$2 including postage. Has pictures.

13. ViaNet board (one), no instructions or cable, \$55 including shipping.

14. Desk stand for VM-1 (still two left), frees much of the most-needed desk space and tilts/rotates monitor to your best angle. \$20 including shipping.

15. Color chips, two sets left. \$40 including shipping.

16. Making Turbo Pascal 3 on the 2000, a one-page patch supplied by BJK. \$1.

17. WordStar 4 version for Tandy printers, send \$5.23 and your original program disk. I will send it back unaltered with a disk containing the MicroPro-modified program and installation.

18. PC Boss, which allows you to navigate disks and directories with un-DOS-like skill and speed, see "Disk Pricing" above.

19. Saving a color screen in Basic, by HEB, one typed page, \$1 including postage.

20. CGP-220 printer with manual and extra ink, works fine but headquarters doesn't have time to use it. \$150 plus \$15 shipping.

21. PC-695 plotter, \$800 in 1988 catalog, haven't plotted a single thing on it and it works fine, \$500 plus \$10 shipping, with extra pens. It's a disguised Houston Instruments 695, and seems to repond to a regular HP7475 driver. It does 11x17 (B-size) paper (a sealed Bienfang pack of 50 sheets thrown in) as well as 8.5x11 (A-size).

22. HQ is selling off all four of its Tandy 10meg hard drives, the original equipment for the 2000HD. We are standardizing on Bernoulli cartridges. Hard drives currently sell for about \$10 a megabyte, so these are a good deal at \$75 each plus \$10 for shipping any number of them. They all work, and have various goodies which I'm too lazy to erase. One has a lot of word processing and miscellaneous programs; a second has AutoCad and VersaCad and other junk; a third seems to have about a thousand accounting programs, Greek to me; a fourth just has DOS on it. No promises, but name your preferences.

23. MS-DOS 2.11.03. Any of you guys who picked up sale 2000s with old DOS disks inside, you really should go down to a Shack and plunk down \$10 for a month-long wait, ten phone calls, another trip to pick up, and the latest 2000 DOS disk, the last our machine will ever get. Alternatively, you can get it in a week or two from us. \$5.31 including postage.

24. Our IBM Composer, used before our 2106 and the earlier laserladies. It produces cleaner typesetting than the lasers, using a polyethylene ribbon like a typewriter. (It IS a typewriter; the best ever made.) Ball cabinet with 32 proportional fonts, 6 to 12 points, two hundred more available. Nine manuals, for use and repair (never yet needed repair). Ten extra ribbons. 12 points is the biggest type size, so you have to enlarge-stat any headlines. It right-justifies if you retype using the line-set control. \$200, plus exact shipping (figure \$20 to \$50 depending on where you are). It was a \$7000 machine.

Sold elsewhere in this issue by members, or by others recommended by HQ:

---a function-key flipchart that slides into slots right above your F-keys. You attach supplied labels with double-face tape, or hand-print the info, on each of 9 stiff pages.

---100 premium Dyan floppies, in the rare 2000 style of quad density with no hub ring, priced much lower and rated much higher than what Tandy sells for the 2000.

---four slide-in accessory boards for the 2000: graphics, clock, memory and hard-drive, all unfortunately retail priced.

To Flee With Dignity

There has been confusion about how to put things in the Flee Market. For one thing, we don't carry offers to buy, because there are too many of them. There is no charge for running an item in the Flee Market.

You must give a price with each item, and we will not print "firm" or "negotiable." The price must include all shipping to the 48 contiguous states, and your work packing and schlepping. If you end up paying UPS from Maine to California, that was the chance you took. Make your prices low, or you'll get no buyers. If you have to put an item in a second Whimper, you must knock its price down at least 30%.

Ads must be brief -- check issues you have to see what we mean. It's best to sell all software in one priced pile, but it will help everyone if you sell your hardware in small pieces. Even separate the controller boards, if you are willing to take the hassle of separate sales. You should get a better total price that way.

We only sell 2000 stuff. Don't send listings of modems, printers, external drives, and so on. All software should be 2000 version in full package with manual, including (unless you say) the title page and program-disk label which are often used to get cheap upgrades.

In your "ad," list a phone number or two. If you don't, I'll have to dig your phone out of the database, which makes things hard for me when I'm going to press. People would much rather call you than write, for a five-minute answer instead of waiting two weeks.

Unless otherwise noted, the items are full-package with all original accessories and paper, except the mail-in cards.

Flee Market

GT-2000 digitizer, useful for all CAD work and vital for VersaCad, several new units at \$350. Jack, 313-777-5900.

Windows 1, a rare beast now and the only one that runs on the 2000. With the Heath label but it's the standard item. Several, all still sealed. \$50. Jack, 313-777-5900.

Two VM-1's, \$90 each. Double floppy, \$190. Double floppy with HD board and a "faulty" hard drive, \$250 -- hope that the HD board is working OK, but no guarantee. They asked me to set the prices and these I consider fair. If they object, so be it. Rick, 414-537-2343.

Color chips, \$75. Paul, 602-837-8872.

Hard drive board with external drive-C connector, plus external 10meg drive, \$350. Memory board with 256K, \$120. Internal 10meg drive, \$110. Computer and monitor, 2000 with 10meg HD, color graphics, CM-1 and software, \$450. Cynthia, 805-733-3657.