Don Lancaster's

RESOURCE BIN

number fifty two

Choosing your own personal computer.

Our usual reminder here that the *Resource Bin* is now a two-way column. You can get tech help, consultant referrals and off-the-wall networking on nearly any electronic, *tinaja questing*, personal publishing, money machine, or computer topic by calling me at (520) 428-4073 weekdays 8-5 Mountain Standard Time.

US callers only, please.

I'm now in the process of setting up my new *Guru's Lair* web site you will find at (where else?) *www.tinaja.com* This is the place you go for instant tech answers. Among the many files in our library, you will find complete reprint sets for all of the *Resource Bin* and other columns. Plus a brand new Synergetics Consultant's Newtwork & lots of links to unique web sites.

You will get the best results if you have both *Netscape Gold* and *Acrobat Reader 3.0* installed. This new reader does utterly amazing things online.

Which Computer?

Uh, a slight change of plans. This month, I was going to talk about some of my favorite software. But it makes more sense for us to look into a few hardware fundamentals first.

So, instead, I thought I would take you "behind the scenes" and review the systems and software I personally use. Then we will look at some of the options you have in picking up your own personal computer.

My Own Systems

My number two system is an older Macintosh LC III. Its Ethernet setup is crucial to all of my Book-on-demand publishing. The Mac also doubles for laser printer testing and development. I also use it for GEnie PSRT access and for system file translations.

Bee uses this Mac for bookkeeping, investments, correspondence, taxes and such. Her favorite tools here are Quicken and Excel. With occasional use of Illustrator and PhotoShop.

MacInTax and *Word*, too.

Our number three system is a new multimedia Pentium. So far, this gets used primarily for Internet access, for webmastering my *tinaja.com* site, and for PIC development.

Number four is an older Apple IIgs. Used by Stacey and Chuck for catalog requests, for order entry and mailing labels. And for my backup BOD work. Bee uses this extensively for much of her graphic design, typesetting and desktop publishing.

My "also rans" here include a fresh set of new PIC development systems that I am currently reviewing. Most notably that *Clearview* by *Parallax* and the *Rice16XX* by *TransData*. As we've seen a time or two before, the PIC is *the* component of the decade.

I am also purportedly doing some development work on that cute new *Mensch I* computer from the *Western Design Center*. And, when I need a lab microcomputer lashup in a hurry, my good old KIM-1 usually can come to the rescue. It's still a favorite.

By the way, I do have a few extra KIM-1's left and a unique collection of classic collectible micro trainers up for sale. Even some *Micro Professors* with built-in printers! Write or call if you need more info on these.

NEXT MONTH: Don shows us a few of the Actors and Acrobats he personally uses.

Numero Uno

Exactly what is my first, finest, and foremost computer system? Thought you'd never ask.

Well, me being me, it is a superb *Hewlett Packard* 4M+ general purpose PostScript computer. Controlled by AppleWriter and its WPL supervisory language on an Apple IIe. Well, really a IIgs run exclusively in its Apple IIe fast emulation mode.

I run well over 90 percent of my work on this system. The 68040 and its coprocessor, a hard drive, and twenty megs of RAM in the 4M+ make a jim dandy "mother's little helper" for the 65CO2. Sort of a silicon *Au Pair* girl.

Oh, yeah. That great 4M+ general purpose PostScript computer is also cabable of dirtying up otherwise clean sheets of paper. In its spare time. But only when it isn't doing vastly more important stuff.

I do *all* of my writing, and *all* my technical illustrations on this sytem. Plus magic sinewaves, letter writing, consulting, my stock market tracking, printed circuits, and math analysis.

To this day, I still consistently do all of my highest productivity and all of my best creativity on this system. Gracefully and elegantly. In a totally virus proof environment.

While I don't expect many others to follow this route, it certainly works very well for me. And I'm still utterly dumbfounded at the way many users *completely ignore* any use at all of *by far* the finest computer they own. Simply because some epsilon minus back at the factory put a stupid label on it. An obscenely misleading label that says "printer" instead of "general purpose PostScript computer".

I have just received a loaner of a new mind-boggling 5SIMX, so the old 4M+ may be in jeopardy. Just as soon as I cobb up a serial interface for the beast. While a tad pricey, the 5SIMX looks like a near-perfect machine for most higher volume Book-on-demand publishing. Duplex, hard drive, real Postscript, 11x17, 24 pages per minute, service manuals available, really great recharge economics.

And I do want to be the first one on my block to use a 5SIMX as a hot tub controller.

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Whither Macintosh?

Well, wither actually. As in "on the vine" even.

I have long been a manic Apple enthusiast. My origional Apple was serial #1243. And I am good friends with #42. I've written dozens of Apple books and zillons of Apple columns. I have been an Apple developer, a IIgs seeder, and I did their primary beta debug on LaserWriter 47.

Until recently, Apple consistently and obviously offered innovative tech excellence, elegant simplicity, and an incredible "plug-and-go" ease of use. They were pretty much the first with viable personal computers, the first with total graphic interfaces, and the first with desktop publishing.

It appears to me they blew it all. Utterly and completely. I have always said it would require extremely frigid conditions in a very unpleasant locale for me to ever buy or recommend a PC. I find those Wintel grunge and sleeze factors to be abhorrent.

To this day, I still firmly do believe that *any* integrated circuit whose part number starts with an eight will end up intrinsically vile and despicable.

Well, hell froze over last month. I could no longer put off getting a PC. Mostly for net access, webmastering, and PIC development.

Sorry, but I flat out could find no compelling reason to renew my Apple developer status this year. To me, it appears that developing for the Apple has clearly become a sucker bet.

Barring a second-coming miracle similar to the one those Amiga rabids have long been doing penance for.

In fact, the only obvious difference I see today between Mac and Amiga is this: The Amiga has a vastly more loyal following and still clearly has a few innovative advantages. At least in video. Mac does not.

While it pains me grievously, I can no longer honestly recommend a Mac to anyone who does not already have one. It seems to me that continuing to teach Mac as the primary machine in a PC dominant world can be a severe disservice to most students. One that borders on a criminal act.

Picking a System

So much has come down recently, that buying a personal computer is a whole new ball game. Past your point where *any* older system is often *largely worthless*. No matter what the pricing, you should *avoid any and all previous systems*. Especially bargain ones out of your local paper or a hamfest.

Unless you have plenty of expertise and some compelling vested interest in continuing with an old machine.

Thus, any MS-DOS system today is almost (but not quite) as useful as a CP/M machine.

You positively, emphatically, and absolutely should *not* even *think* of an older system if you are in any way new to computerdom.

The first and foremost key question to ask is "Can the beast do a graphic Internet access?" *Nothing else matters!* Anything less than this will do dated things old ways. Costing you far more time and money than any miniscule front end savings.

Minimum System Specs

The choices rapidly boil on down to two: A fast-fading Mac System 7 or higher. Or PC Windows, with Win 95 gaining the upper hand.

Let us define a workable baseline entry-level system. One that should meet most people's needs most of the time. And soon should be available in the $1200 range. Printer extra.

Any mass market Pentium running Windows 95. Speed is not that big a deal for ordinary users, with 75 MHz adequate. Faster stuff costs more than it will benefit you. Besides, you can always cheaply upgrade later.

A CD ROM for sure. Because most software these days is far too complex to load off floppies. There are several different CD ROM speeds available. Namely: *really slow* (8X), *excruciatingly slow* (6X), *utterly appalling* (4X), and *glacial* (2X).

Note that the "times" figures refer to how fast the drive spins. The actual throughput of an 8X drive is nowhere near four times that of a 2X drive.

A bare minimum of 8 Megs of RAM. Preferably 16. A built-in modem, 14.4 or higher. Fax if available.

A monitor with a *maximum* pitch of 0.28 millimeters. *Lower* is *better*. And a min display resolution of 800 pixels wide by 600 pixels high.

Everybody always lies about their monitor size. Screens are *far* smaller than you'd first guess. Note that a "fifteen inch" monitor has a display that's less than *eight inches* high!

Thus, to find your display height, you *divide your monitor size by two*. Try several different monitor sizes.

Some sound card or built-in sound capability. Preferably with speakers.

A built-in hard disk. Size: 800 Megs

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Ask the Guru I or II or III	$24.50
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PostScript Show and Tell	$29.50
Intro to PostScript Video	$29.50
PostScript Reference II	$34.50
PostScript Tutorial/Cookbook	$22.50
PostScript by Example	$32.50
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A FEW COMPUTER HARDWARE RESOURCES

Adobe Systems
PO Box 7900
Mountain View CA 94039
(800) 833-6687

Apple Computer
20525 Mariani Ave
Cupertino CA 95014
(408) 996-1010

Comp-U-Mart
899 Presidential Ste 110
Richardson TX 75081
(800) 864-1155

Computer Hot Line
15400 Knoll Trail Dr #500
Dallas TX 75248
(800) 999-5131

Computer Journal
190 Sullivan Crossroad
Columbia Falls MT 59912
(406) 257-9119

Computer Reseller
600 Community Dr
Manhasset NY 11030
(516) 562-5000

Excel/MicroSoft
One Microsoft Way
Redmond WA 90852
(800) 877-1900

Heathkit
PO Box 1288
Benton Harbor MI 49022
(616) 982-3200

Hewlett-Packard
PO Box 10301
Palo Alto CA 94303
(415) 857-1501

Microcomputer Journal
1700 Washington Ave
Rocky Ford CO 81067
(719) 254-4558

Netscape Gold
501 E Middlefield Rd
Mountain View CA 94043
(415) 528-3777

Packard-Bell
PO Box 5050
Thousand Oaks CA 91359
(818) 865-0270

Parallax
3805 Atherton Rd #102
Rocklin CA 95765
(916) 624-8333

Quicken/Intuit
2650 E Elvira Rd #100
Tucson AZ 85706
(520) 295-3080

Synergetics
Box 809
Thatcher AZ 85552
(520) 428-4073

Transdata
14330 Midway Road #104
Dallas, TX 75224
(214) 980-2960

Transverter Pro/TechPool
1463 Warrensville Cntr Rd
Cleveland OH 44121
(800) 777-8930

Western Design Center
2166 E Brown Rd
Mesa AZ 85203
(602) 962-4545

minimum. Chances are you will fill up one of these in your first week of use. Especially since PC software is so obscenely bloated. If you are going to run video work or nonlinear editing, you might be able to squeak by with a 15 Gig hard drive instead.

A printer? PostScript, of course. Do not even *think* of getting a printer that does not speak *real* Adobe PostScript. The best mid-range choice is by far the *Hewlett Packard* 4M+. But you can expect an improved 5M+ shortly.

If you need low cost color, there's slower low end inkjets that more or less work. The *Hewlett-Packard* 650C is one example.

One way to make low end printers handle PostScript is by use of Adobe's incredible *Acrobat*. Freebie viewers are found at *http://www.adobe.com* Other possible options here include the use of *GhostScript* or *Transverter Pro*.

The Wal-Mart Special

I found my own Pentium as a blue light special at Wal-Mart. $1390. Cash and carry with a six month warranty.

It is reasonable to expect a further price drop this year. Maybe $999 for a comparable machine.

With monitor but less printer.

It does pay to wait for sales. And to buy under the leading edge. Beware of anything that's two generations out of date. For instance, don't ever pay a penny over $199 for a 486.

Everybody dumps on *Packard-Bell*. But hey – they're cheap. Uh, they're also cheap. My own problems have included a monitor that in unstable in higher res modes, its insistence of installing a nonexistant com channel on startup, and Ethernet hassles.

I've twice had to use their fee based tech support. Both times, I found it prompt, courteous, and cost effective. Not to mention solving the problem at hand. Quickly and totally.

The other useful computer sources advertise in *Comp-U-Mart*, *Computer Reseller*, and *Computer Hot Line*.

By the way, you can completely forget about all of that $500 Internet machine hype. The $500 is just a secret insider code word for "let's all flush MicroSoft". And is brought to you by the same fascist thinking that brought you Big Brother mainframes, one-way Teletext, and diskless workstations.

As several very prominent industry leaders have proven to us beyond any shadow of a doubt, products do not sell all that well when their primary design motivation is simple spite.

Build Your Own?

Can you save by building your own computer up out of bits and pieces?

No way!

Building your own car makes a lot more sense. Or your own microwave oven. Or even a German Shepherd.

The profit margin on typical mass marketed computer systems will get measured in dimes, not dollars. You will be unable to find all the parts for anywhere remotely near the cost of a ready-to-use system. Especially when you factor in such things as shipping and the value of your time.

One little problem with one bit or piece, and you will get into endless frustration. Uh, reliability counts. Big time. Besides, over 95 percent of any computer these days is your software and the operating system.

There is also no homebrew system warranty and you'll find a near total lack of technical support.

Building your own computer *may* make sense as a learning experience. Especially when you want to get into computer repairs and servicing. If so, *Heathkit* is often your best route.

But no way will any home building save you time and money.

If you absolutely insist on building your own system from the ground up, those previously mentioned *Computer Reseller*, *Comp-U-Mart*, and *Computer Hot Line* mags are useful sources.

Should you really want to continue on an older orphan system, there is a great *Computer Journal* magazine that tightly focuses upon these classics. Do not confuse this with a *Microcomputer Journal*, once called *Computer Craft*.

By the way, *Microcomputer Journal* does have a new publisher. Meaning it has a fresh chance of success.

This Month's Contest

For our contest this month, just tell me about your very favorite hardware setup. Especially if it is unusual or oddball. Or off the wall.

There will be a largish pile of my new *Incredible Secret Money Machine II* books going to the dozen or so better entries, plus an all-expense-paid (FOB Thatcher, AZ) *tinaja quest* for two that will go to the very best of all.

Send all your *written* entries to me here at *Synergetics*, rather than to *Nuts & Volts* editorial. ✦

Microcomputer pioneer and guru Don Lancaster is the author of 33 books and countless tech articles. Don maintains his no-charge US tech helpline found at (520) 428-4073, besides offering all of his own books, reprints, and consulting services. Don also has two free catalogs full of his resource secrets waiting for you. Your best calling times are 8-5 on weekdays, Mountain Standard Time.

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