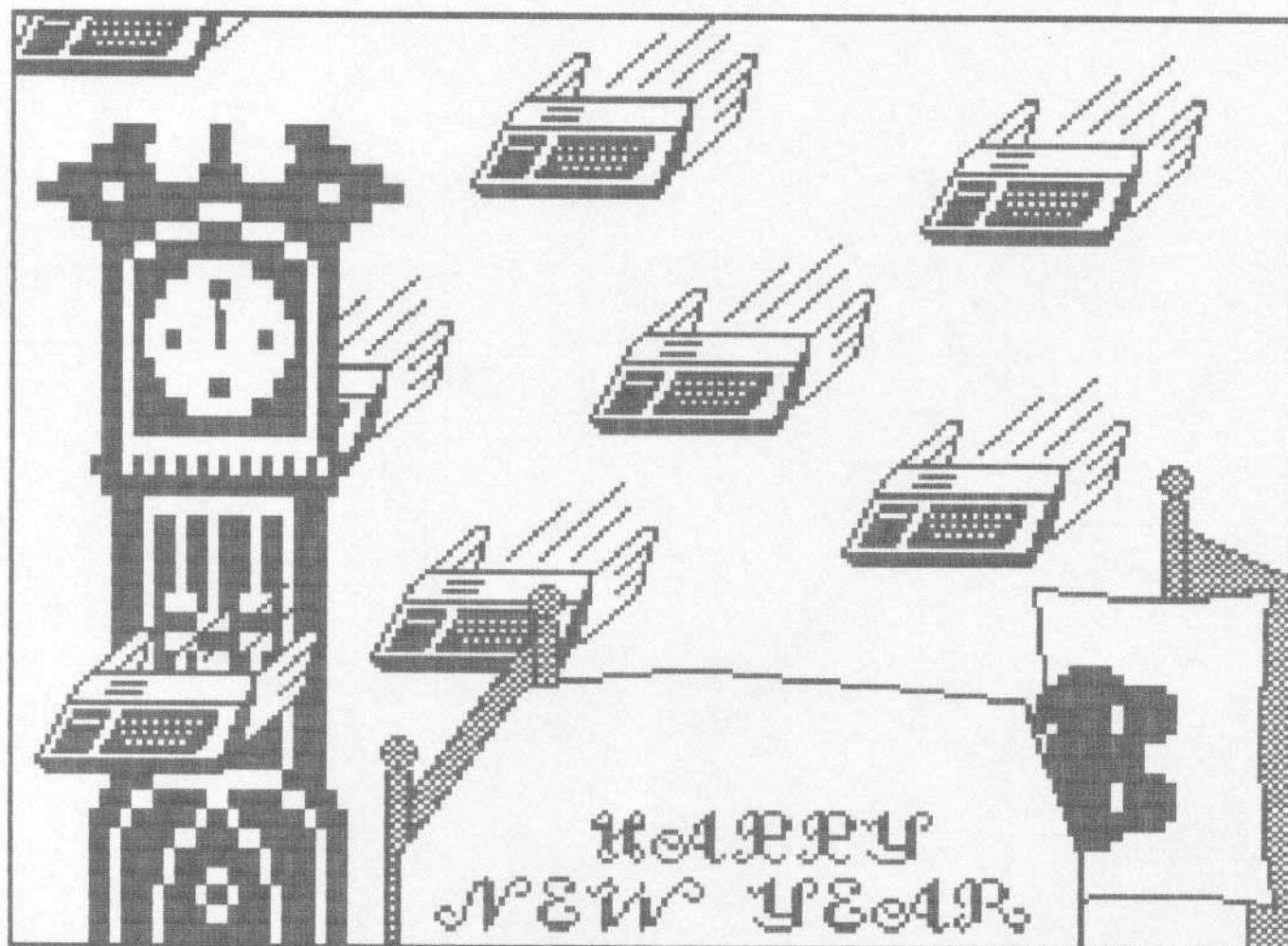




The Ottawa TI-99/4A  
User's Group

# NEWSLETTER

*Volume 14, Number 1 ... January 1995*



OTIUG: 222 Guigues Ave, Apt 603  
Ottawa, Ontario CANADA K1N 5J2



## COMING EVENTS

January meeting : 3 Jan 95 (oops)

February meeting: 7 Feb 95

March meeting: 7 Mar 95 (last meeting)

Meetings take place at Lucie Dorais' apartment, at 7:30 pm. The address is on the cover page. Everyone is welcome for a friendly and informal discussion of the TI.

Please call in advance, if possible. Lucie's number is on the last page.

Any and all articles are welcome and solicited for publication in this newsletter. Submit your articles to Lucie Dorais c/o editor, or directly to me by internet e-mail at [mbrent@proton.com](mailto:mbrent@proton.com)

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## The President's Two Cents Worth



No, this is not written on December 6, although the cover picture was ready by that time... even Mike realized that such a tight schedule was hard to adhere to, so he decided to take his holiday first, then do the newsletter... a wise choice. It is the 22nd, and I am preparing myself for my own holiday trip to Montreal and Quebec City.

This is the beginning of a new year, which will be our shortest. If we go as planned, there will be two more newsletters, in February and March. Then... it is up to you to keep it going, because I will not. I have received two membership renewals, and I thank those two persons for their support, but I have returned the cheques to them. We have just enough money in the bank to take us to the March newsletter. Anybody who was a paid member for 1994 will of course receive the last three newsletters as part of the 1994 subscription, as will the groups with which we still exchange.

But I wish you all a very Happy New Year anyway. If you have not done it yet, it is time to subscribe to MICROpendium, which remains the most complete source of information on the TI community: P.O. Box 1343, Round Rock, TX 78680. Rates are \$42.50 US for Canadian subscribers (bank drafts or money orders only), \$35US for American ones. You can also join the other groups that are still publishing newsletters, which range from "not much there" to absolutely first class; write to me and I will give you the list.

### The Editor Speaks...

Well, first off... was it \*really\* wise of me to wait till after my vacation? Well.. it's right now 3:30am on the 10th of Jan. Yes, I'm late again. Something about being in Ottawa seems to mean that I always have far too much to do. <sigh> I apologize again. I'm working on the Feb issue as soon as this one is printed. I will get ONE out on time, dammit!

Well, I did warn that the newsletter may be very late, so maybe I'm not in that much trouble.

How many people noticed that the TI's on the cover picture are backwards? I noticed as I was printing the page, but left it as is. I figured maybe Lucie was employing artistic symbolism. ;)

I found a bit of new clip art, but nothing that I wanted, so be prepared for still more irrelevant pictures. heh. Jeff did NOT get an article written, even with all the extra time. What about it, Jeff? Gonna have something for Feb and March? Just two more, buddy!



So, even though the newsletter is "yet another thing" that I have to get done, it has been fun. It would be nice to see the newsletter and the UG continue, but, I can't do it, and nobody seems to be stepping up to take over. Since I'll be moving to BC at the end of March, I won't have any of the sources that I have now, although I've given thought to writing my own newsletter from out there. (Though maybe only 4 times a year.) I will probably look into it. If anyone has any interest in such a thing, send me an email ([mbrent@proton.com](mailto:mbrent@proton.com)) and let me know. A few simple words make a big difference in motivation.

So, I see from the TI News that Lucie passed on that the TI Emulator, PC99, is finally getting the speed issue under control. It looks pretty good now, in fact. Now, if the price was addressed, my money would be on it's way, and I don't even own an ibbim yet. But, well, it seems EVERYTHING for the ibbim is overpriced. I suppose that's the way the world is going, and as long as people buy, it's the way it will stay. <sigh>

Yes, I called it an ibbim. How would YOU pronounce 'IBM'?

Anyway, Lucie contributed a few things to this month's newsletter, and I've got a few things, so hopefully we can make up for Jeff. Well, 'nuff said. Let's get into it.

## TI NEWS

*from MICROpendium, October and November 1994*

### -A new 80-columns card

Enhanced Video Processor Card(EVPC), from Germany. Runs at CRU >1400; can display 256 colors from a palette of 256,000 which can be expended to 16 million; in-cludes a socket for a sound chip from the console, 128K of video RAM and a 64K DSR-ROM; it can support up to eight sprites simultaneously. Price is about \$255US (depending on rate for Deutschmarks of course). Contact Gerd Weissmann, Koenig-strasse 17-19, D-67655 Kaiserslautern, Germany; phone/fax at 0631-12169.

### -Chicago Faire

It was less attended this year, and there were fewer new products; on the other hand, there was a lot of second-hand stuff for sale. A sign of the times? Noted by Gary Cox, among other things (see below for Western Horizon Technologies):



A new version of the PC99 emulator which now runs faster than a TI (at least on a 486/50Mhz PC). A nice debugger was added, it is now compatible with Plato disks, and it emulates the TI RS232 port. This is NOT the Swartz emulator, which was pulled off thanks to TI (who supports the PC99) and of which there are no news yet.

For Geneve owners, a new MDOS configuration program by Tim Tesch of S&T software, and the latest version of MDOS, 2.20 (to correct minor bugs) from Beery Miller. Beery apparently spent a lot of time "pushing his involvement on GENie with the TI Round Table"; as a regular of this RT, I can say that Beery does a tremendous job to keep it alive; he also finds time to be SysOp of the GENie Chemistry RT...

The SCSI controller project is still in beta testing phase.

### -Western Horizon Technologies

. An AT-Keyboard and ROM upgrade, \$65US. Add any standard AT keyboard to your 99/4A and you can use two keyboards simultaneously! The ROM upgrade allows for future enhancements in RAM (up to 64K of 0-wait state). The interface installs in the console, clipped to the 9900 chip, and requires only one solder point.

.Two new XB modules: the latest version (6.0) of Rich Gilbertson's RXB, a much enhanced version, and XBIII, by Winfried Winkler of Germany (once carried by Asgard), faster and with more commands than standard XB. Both are pending 20 pre-sale orders.

. Also in the works: TURBO Video, upgrade for Myarc Geneve 9640, \$25 US; speeds video display up to 25 percent. 4a Memex Jr, a memory card to provide up to 4 megs of RAM available for programs (MDOS now supports only 2 megs). Upgradeable in 512K increments for \$25 per increment. Etc. etc

For further info, contact Western Horizon Technologies (Don O'Neil), 3297 Woody Lane, San Jose, CA 95132, phone (408)934-0352, e-mail doneil@delphi.com

### -New programs reviewed

. Newsletter Editor and Formatter by Bill Gaskill, not as WYSIWYG as Page Pro, but apparently much better for text in columns. This is fairware, and if you send \$1 US to Charles Good, the Mp reviewer, you can try it (registration is \$15): Charles Good, P.O. Box 647, Venedocia, OH 45894.

. USVBA Power Volleyball, an assembly game of skill played with joysticks. You get only two players on screen, but the ball movements are hard at higher levels, so it is hard to score against the computer (but you can also play against a friend). Full documentation, DSSD disk; \$10 US including postage: Program Innovators, 4122 Glenway, Wauwatosa WI 53222. Ask for their catalogue.

## TEN YEARS AGO

by Lucie Dorais

NOTE: Since last month, an old member (Bob Saunders) has sold his system at our monthly meeting. He had all newsletters from 1982 to early 1988, so I now have seen the December, 1984, issue, and the cover was exactly the same as a year later...

The first thing that impresses me in the January, 1985 issue of our newsletter is its thickness... 12 sheets, versus 8 last month, and as you remember this has come up significantly since Mike Ward/Brent took over as editor. But the visual appeal is far better now of course.

Back in 1985, the UG was big enough to attract close to 70 people for the meetings (now I consider myself very lucky when I attract three) and to invite outside guests; the November one, thanked in the Prez (Bill Sponchia) editorial, was from Datapac, Telecom Canada, and talked about using Datapac to access big commercial networks.

At that time the Library was useful, even the cassette one: 13 cassettes sold (at least one by me if I remember well), and 15 diskettes.... There was also a book library, so big that there was an "East end library", maintained by Jane Laflamme, so there probably was a "West end" one as well.

The BBS, still in its Extended Basic version, had been improved with the addition of INFO-MART; this is still a feature in our all-Assembly Texlink, but how long ago was it since you last read the info stored there? And the length of the messages was increased from 16 to 32 lines (hey, now it is only 30 lines long... I feel cheated...)

Laurier Books, still located in L'Esplanade Laurier, offered a 20% reduction on all TI books... When was the last time that you bought a TI book in a bookstore? The Book Market on Dalhousie has a few, but they are very, very expensive, like collectors items. Further in the newsletter, Berry Minuk lists many books on the TI and rates them from two stars and a half to four.

One big issue at the December 84 meeting was a "Code of Ethics" for the Group, fully listed in the newsletter; it was added to the Constitution as Item 13 and dealt mostly with pirating software; you can guess the content.

A page on CorComp (its president, Jackierae Sagouspe, was interviewed over the phone by Paul Berlinguette, the then newsletter editor), now shipping "lots of the 9900 MICRO expansion system (neat and compact system housing an RS232, 32k and a Disk Controller card)". Interestingly, when asked about a TI CLONE, CorComp answered that none was planned by them, "as personal computer market is so volatile and is considered a poor venture capital risk". Too bad... they probably would have done a great job on such a product, and delivered it in time.



Ten years ago, our 14 years old wiz-kid was Shawn Millar, but his beginning column dealt mostly with High Scores in games. He also had this useful tip: if by mistake you

press FCTN = and exit the Basic or XB environment and loose your program, you can recover most of it is you quickly do this:

- . turn the computer off, then on again
- . type CALL INIT :: CALL LOAD(-31806,16)

(ed's note: I have seen this published elsewhere, but I have never had it work nor known anyone who made it work. Ideas? A hoax? I think so. This address on the 4A has to do with user-defined interrupt routines.)



Bruce Caron has a very long explanation of sector 0 on a TI disk, which is the Disk Bit Map. It keeps track of the disk name, number of sectors on disk and per track, rom info (ever wondered why the letters "DSK" at byte >000D?), the proprietary disk flag, number of tracks and sides per disk, density, 36 bytes not used, then the bit map itself, which keeps track of which sectors are used or not (=free).

Interesting ad from Exceltronix Inc (on Bank Street): special price for a Shugart SA455 drive, only \$228 instead of \$269.

For that price, which now buys you a 300 meg Hard Drive (and remember the value of money then), you got a state of the art double sided drive. Elsewhere, Bruce Caron advertises his second-hand drive (probably single sided, not mentioned) for \$135.

Art Green has a small article about those extra CALLs you got with the Personal Record Keeping module.

Bob Boone, in his "Prior Patterns" column (why the title? he lived in Arnprior...), falls in love with the new CorComp Disk Controller card, which can format double sided/double density, but mostly with the Disk Manager program that comes with it and that can always be accessed from the opening menu. Actually, he liked it so much that he showed it to Bruce Caron, who copied its look and functionality for DM1000 a little bit later... but with one thing improved: the CC disk manager did a screen dump when listing the disk content to the printer, while DM1000 does a real listing, which is necessary with DSDD disks: you really can get 127 (small) files on a disk! Apparently, the CC Disk Manager was a big improvement on the TI Disk Manager module. Never having used one (as I have always been a CorComp only person), I cannot tell...

Final pages, on the Library; the then Librarian, Bob (Picard? Boone?) has decided to



sell the diskettes and the cassettes, at \$5 each, so the Club can make a little money; the main purpose is to get the disks only to those who really want them, instead of making copies for everyone attending the meetings. Another page on the library has a nice picture... of an American, Colonial style small town library, complete with clock tower and trees, taken from the music file "Amazing Grace" by Sam Moore Jr. One of his popular music disks was the disk of the month. Great successes at the last meeting were a Games package, a Utility package (sold out), two CAI packages (maths and miscellaneous), and Nutrition.

### OSHAWA HUNGARIAN COOKIES

by Lucie Dorais  
Recipe by Tom Jakobfy

With December, again, came a special issue of the OSHTI, the Oshawa Users' Group. As last year, there is a special page devoted to every group that the OSHTI is still exchanging newsletters, and the page of OTIUG is decorated with a frog...

I wonder why? He has some thanks for us, and wishes that "maybe someone unexpected will 'pop' out of the woodwork" to take over the Ottawa UG. Well, Tom, it has not happened yet...

In his November issue, Tom gave his Internet address, so I wrote him to tell him how much I look forward to the OSHTI newsletter each month because it contains recipes... although I never had time (or the right ingredients) to try one yet. Tom promptly sent me his latest, which was intended for his December newsletter. When I got it yesterday, I was very flattered to see that he had dedicated it to me! I pass it on to you, as it looks simply delicious. Thanks Tom!

Tom is of Hungarian descent, and he got most of his recipes from his late Aunt Helen. This is a quote from his e-mail:

"I have most of her cook books and there are thousands of recipes. I am trying to keep the Hungarian (Magyar: pronounced mawd'yar) traditions alive. I enjoy Hungarian cooking and a lot of my recipes are from a small book that my aunt bought for \$.50 back in the 1950's. However, as I have found, the best way is to taste authentic food. When I was over in Hungary last summer, I tasted lots of Hungarian cuisine and watched the

our hostess cook at home, so I have a better feel for it."

### ALMOND BARS (MANDULAS RUD)

- > 3/4 cup of almonds, or 2 cups ground almonds (I like to grind fresh ones in my food processor)
- > Mix the ground almonds with 1 cup of pastry flour
- > Cream 1/2 cup of good quality unsalted butter
- > Add 1 cup of icing sugar to the butter and fluff it as you add it.
- > Add the flour/almond mixture to the butter mixture and mix thoroughly
- > Form mixture into a ball and roll it out on a lightly floured board to form a rectangle about 1 cm (1/2 ") thick
- > Cut into strips 2 1/2" x 1/2" and place on a lightly buttered bake sheet. Cook for 15-20 min. at 350 F.
- > You can 'roll' or sprinkle icing sugar on each cookie before serving. You don't have too, they taste nice and crunchy with air pockets.

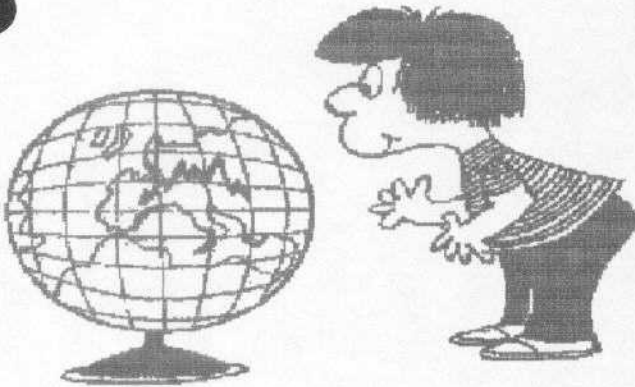
And a final note, also from Tom's e-mail:

"BTW, when making cookies I use an aluminum sheet with an air pocket between two aluminum sheets (Canadian Tire \$14.99, expensive). It works great and no sticking or burnt bottoms."

## TVGeneve Bulletin Board Directory

Copyright (c)1994 by S&T Software

Last March, we published a list of BBS for Tiers compiled by Tim Tesch and dated January 2, 1994. On August 19, Tim published an updated list, which we got from the Toronto TI Users Group.



Here are the changes:

<u>City</u>	<u>ST BBS Name</u>	<u>Phone #</u>	<u>BPS</u>
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### SECTION 1: BBS's operating on a TI or on a Geneve

add:

#Covina, CA	Club 99 BBS	818-339-1134	24
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delete:

Chicago, IL	TI South BBS	312-651-7252	
Lake Sinnissippi,WI	Mayberry, R.F.D.	414-386-5699	
Port Washington, WI	Graphics Clipper	414-284-6108	

### SECTION 2: IBM AND COMPATIBLE SUPPORT SIG's for TI/Geneve

add:

Miami, FL	Miami UG	305-625-8520	24
Belleville, IL	MuTIverse BBS	618-236-7907	14.4
Port Washington, WI	Graphics Clipper	414-284-6108	14.4

delete:

Toronto, ON	TI*Tower BBS	416-921-2731	
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## Tonkin's First Computer Dictionary

Acknowledgements to Bruce Tonkin, T.N.T. Software Inc., 34069 Hainesville Road, Round Lake, IL, 60073 (312)-223-8595, for his article in Dec '87 COMPUTERPEOPLE Monthly, from which this is copied. This file may be freely distributed, but not for profit, etc. Be sure to take a look at MY WORD! and BBC, IBM-Basica compiler.

Advanced: (adj.) doesn't work yet, but it's pretty close. See: bug, glitch.

Analyst: (n.) one who writes programs and doesn't trust them. A cynic.

Assembler: (n.) a minor program of interest only to obsessed programmers.

BASIC: (n.) a computer one-word oxymoron.



BBS: (n.) a system for connecting computers and exchanging gossip, facts, and uniformed speculation under false names.

Benchmark: (n.) a test written ostensibly to compare hardware or software, but actually used by manufacturers to misinterpret or quote out of context in advertisements.

Binary: (n.) a two-valued logic especially susceptible to glitches and bugs. It originated as a way of counting on the thumbs, since programming managers usually find fingers far too confusing. See: Hexadecimal, Octal.

Bug: (n.) any program feature not yet described to the marketing department.

Bus: (n.) a connector you plug money into, something like a slot machine.

Byte: (n.) eight bits, or one dollar (in 1950 terms). Presently worth about two-tenths of a cent and falling fast.

C: (n.) the language following A and B. The world still awaits D and E. By Z, it may be acceptable for general use.

Chip: (n.) a stylized picture of a logic diagram on refined and alloyed sand. See: glitch, bug.

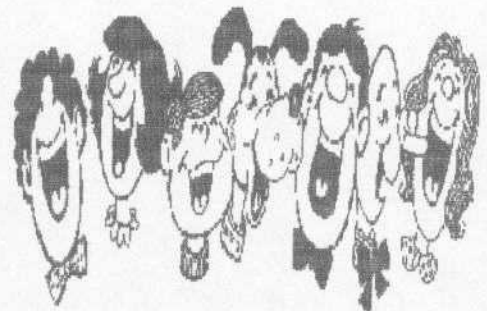
COBOL: (n.) an old computer language, designed to be read and not run. Unfortunately, it is often run anyway.

Code: (n.) a means of concealing bugs favored by programmers. (v.) the process of concealing bugs by programming.

Cookie: (n.) any recondite message displayed by a time-shared system. the message is not often seen, because it only appears when the system is operating properly. Common cookies include the timeless "Murphy was an optimist" and "When in danger or in doubt, run in circles, scream and shout."

Copy Protection: (n.) a means of circumventing various rights granted by the Constitution so as to artificially inflate profits.

CPU: (n.) acronym for Central Purging Unit. A device which discards or distorts data sent to it, sometimes returning more data and sometimes merely over-heating.



Crash: (v.) to terminate a program in the usual fashion, i.e. by locking up the computer or setting a fire at the printer. (n.) the process of such termination.

Data: (n.) raw information, esp. that supplied to the central purging unit for transformation and disposal.

Data Base Manager: (n.) any fast filing system which gives misleading answers. Also see: menu, bug.

Diagnostic: (n.) a test foolishly but often believed to determine the reason for a particular failure. Competent professionals prefer the I Ching or phrenology.

Digital: (adj.) of or pertaining to the fingers, esp. to counting on them. See: Binary, Hexadecimal, Octal.

Documentation: (n.) a novel sold with software, designed to entertain the operator during episodes of bugs or glitches.

DOS: (n.) Acronym. a program which outpes questions given answers, putting users in jeopardy.

Emulate: (v.) to simulate hardware glitches with software bugs. Emulator: (n.) a program which emulates. See: Virtual.

Engineer: (v.) to build somethign with bugs (software) or glitches (hardware). (n.) One who engineers.

Format: (v.) to erase irrevocably and unintentionally. (n.) The process of such erasure.

Forth: (n.) a stack-oriented programming language written right to left and read from bottom to top. It runs efficently on no common computers and is written effectively by no common programmers.

FORTTRAN: (n.) an ancient programming language which changed IF's to GOTO's by using a strange three-valued logic on binary computers.

Glitch: (n.) an undocumented design feature, esp. of hardware.

GOTO: (n.) an efficient and general way of controlling a program, much despised by academics and others whose brains have been ruined by over-exposure to Pascal. See: Pascal.

Hard Disk: (n.) a rapidly spinning platter divided into sectors. See: Sector, Glitch, Bug.

Hardware: (n.) anything prone to physical failure.

Head: (n.) the part of a disk drive which detects sectors and decides which of the two possible values to return: 'lose a tum' or 'bankrupt.'

Hexadecimal: (adj.) of or refering to base-16 numbers - binary numbers grouped four digits at a time so as to quadruple the opportunity for glitches and bugs. Originated as a means of counting on the fingers of one hand, using the thumb for the 'carry.' Purists who don't like to use the thumb at all prefer 'octal.' See: Octal, Binary.

Icon: (n.) a complex, blurry, and easily-misinterpreted pictorial representation of a single unambiguous word. Preferred by illiterates and semi-literates for these reasons, and by others because it slows most computers down so even a cretin with an IQ of 53 may

justly feel superior.

Increment: (v.) to increase by one, except when segments are used; then, the increase may be by sixteen unless word mode addressing is used in which case the increase is by one or two, depending on the processor and whether the address is on an even boundary or such increase causes an overflow exception processor fault, which may either cause the program to crash or decrease by a large number instead of increase, depending the register used and the operation being attempted.

Iterate: (v.) to repeat an action for a potentially and often actually infinite number of times.

Joystick: (n.) a device essential for performing business tasks and training exercises esp. favored by pilots, tank commanders, riverboat gamblers, and medieval warlords.

K: (n., adj.) a binary thousand, which isn't a decimal thousand or even really a binary thousand (which is eight), but is the binary number closest to a decimal thousand. This has proven so completely confusing that it has become a standard.

Kemal: (n.) a misspelling of 'kernel' used by beginning (functionally illiterate) programmers, especially those with some knowledge of C.

Kernel: (n.) the core of a program, i.e. the source of all errors. Thus the common misspelling, 'kernal.'

Keyboard: (n.) a device used by programmers to write software for a mouse or joystick and by operators for playing games such as 'word processing.'

Kludge: (v., adj., or n.) to fix a program in the usual way.

Leading Edge: (n., adj.) anything which uses advanced technology. See: Advanced.

License: (n.) a covenant which tells the buyer that nothing has been purchased and that no refund, support, advice, or instruction may be anticipated and that no resale is permitted. A modern way of saying "Thanks for all your money and goodbye," far less crude than "Stick 'em up" but even more effective since the purchaser will often borrow the funds requested.

Logic: (n.) a system of determining truth or falsity, implication or exclusion, by means of a sort of binary Oneiromancy.

Loop: (n., v.) 1. a series of instructions to be iterated. 2. the process of iterating them. Most loops are unintentional and can be quite droll.

Macro: (n.) a series of keystrokes used to simulate a missing but essential command.

Megabyte: (n.) more than you can comprehend and less than you'll need. See: UNIX.

Megahertz: (n.) a way of measuring how well your computer matches the frequency of your local television channels. Most computers perform exceptionally well on this test, especially the higher-quality foreign-made ones.

Menu: (n.) any list of choices, each of which is either unsatisfactory or in some fashion contradictory.

Micro-: (prefix) anything both very small and very expensive.

Mode: (n.) a way of forcing glitch or bug.

Modem: (n., v.) a device used to connect computers (see: BBS) or the process of transmitting data between or among computers, esp. for those unable or unwilling to speak.

Monitor: (n.) a sort of television with exceptionally poor picture quality and limited to a single very local station.

Motherboard: (n.) the hardware version of the software 'kernel.'

Mouse: (n.) an input device used by management to force computer users to keep at least a part of their desks clean.

Nano-: (prefix) a thousandth of a thousandth, but not a binary thousandth in either case. Decimal is used for all very small measurements since no further confusion is necessary.

Octal: (n.) a base-8 counting system designed so that one hand may count upon the fingers of the other. Thumbs are not used, and the index finger is reserved for the 'carry.'

Offset: (n.) a method which permits access to any memory location in thousands of ways, each of which appears different but is not. Used with segments. See: Segment.



Operator: (n.) 1. One who has no experience with computers. 2. Any beginner, esp. one part of whose salary is paid in soft drinks and processed salted food treated with dangerous and illegal drugs or preservatives. Differs from a programmer in that a programmer will often take the dangerous and illegal drugs or preservatives directly.

Pascal: (n.) a classroom project which was released before it could be graded - probably a good idea, considering. One wishes the University had had a better system of academic controls.

Patch: (v.) to fix a program by changing bytes according to the rules of logic. (n.) Any repair of this form.

Pirate: (v., n.) to steal software, or one who is such a thief. True pirates see nothing wrong with thievery, having successfully forgotten or repressed all moral values.

Pop: (v.) to remove from an area of memory naively thought to be the stack in a futile attempt to keep a program running.

Portable: (adj.) that which can be physically moved more than a hundred yards by an unaided olympic athlete without permanent damage to that individual more than 50% of the time.

Printer: (n.) a small box attached to a computer and used to start fires in cold weather.

Procedure: (n.) a method of performing a program sub-task in an inefficient way by extensively using the stack instead of a GOTO. See: Pascal and C.

Processor: (n.) a device for converting sense to nonsense at the speed of electricity, or (rarely) the reverse.

Program: (n.) that which manipulates symbols rapidly with unforeseen results. Also: a bug's way of perpetuating bugs.

Programmer: (n.) 1. one who writes programs and trusts them. An optimist. 2. Any employee who needs neither food nor sleep but exists on large quantities of caffeine, nicotine, sucrose, and machine-vended preservatives thinly disguised as foodstuffs.

Programming Language: (n.) a shorthand way of describing a series of bugs to a computer or a programmer.

Prompt: (n.) a computer request for a random operator error. Also a game where the computer plays the part of Vanna White and the operator, a contestant. There are no prizes for winning.

Push: (v.) to put into an area of memory believed to be the stack for the ostensible purpose of later retrieval. Tonkin's rule: In any program there are always more 'pushes' than 'pops.' See: Recursion.

Quantum leap: (adj.) literally, to move by the smallest amount theoretically possible. In advertising, to move by the largest leap imaginable (in the mind of the advertiser). There is no contradiction.

Recursion: (n.) a programming method which tests the limits of available memory in an iterative way by using the stack. When the program fails, all memory has been used. Memorize this definition, then see: Recursion.

Register: (n.) a part of the central purging unit used to distort or destroy incoming data by arbitrary rules. See: Increment.

Relational: (adj.) purchased from, or sold to, blood kin. See: True relational.

Sector: (n.) a disk arc on which is inscribed 'lose a tum' or 'bankrupt.' See: Hard disk, Head, Glitch.

Segment: (n.) a way of restricting or complicating access to memory in an attempt to break a programmer's will to live. Outlawed by both the A.S.P.C.A and the U.N. but still practiced in some backward areas of the world. See: Offset.

Software: (n.) anything other than hardware. That which hardware manufacturers can blame for physical failures.

Sort: (v.) to order a list of data in such a way as to destroy all relationships between the items. (n.) The process which accomplishes this, esp. if it takes a very long time.

Source Code: (n.) a record of a programmer's thought for a period of time. A stream-of-consciousness novel or short story.

Spreadsheet: (n.) a way of forcing repeatable answers from insufficient data for superficial purposes. Also, a game played during office hours by bored or restless yuppies.

Stack: (n.) any area of memory which grows and eventually destroys both code and data. (v.) To place in such an area.

Standard: (n., adj.) a design target which manufacturers may embellish, improve upon, or ignore as they wish, so long as it can be used profitably in their advertising.

Transportable: (adj.) said of software - that which can be put on a new machine in less time than it took to write in the first place. Said of hardware - that which can theoretically be moved more than ten feet in one minute by some combination of machinery or explosives. The meanings are equivalent.

Truly relational: (adj.) relational, but where the paternity is indubitable.

TSR: (n.) acronym for Terminate and Stay Resident. A way of turning a useless computer with plenty of memory into a computer with no memory at all.

Turbo-: (prefix) computer software which uses air under pressure (supplied by a special fan) to achieve high performance.

User-friendly: (adj.) trivialized, slow, incapable, and boring. See: Icon, Mouse.

UNIX: (n., v.) a DOS which needs more memory than you have and run more slowly than you can bear. To UNIX: to grossly enlarge and slow down out of all proportion, esp. by using C.

User: (n.) one who knows from experience that programs cannot be trusted. A realist.

Vendor: (n.) a manufacturer's lackey.

Virtual: (adj.) emulated. See: Emulate.

Warranty: (n.) a list of vendor's promises with carefully-worded exceptions which cancel each of the promises in turn. See: License.

Windowing: (n., adj.) a way of making a large and easily-read display into many small, cluttered, and confusing ones.

Word Processor: (n.) A program which makes a \$5,000 computer into a \$250 typewriter. A computer game for beginning operators.

WORM: (n.) acronym for Write Once, Read Mangled. Used to describe a normally-functioning computer disk of the very latest design.

XYZZY: (n.) a common user prompt.

Yarrow: (n.) kind of stalks wuse by computer diagnosticians when performing the ritual of the I Ching. See: Diagnostics.

Zaxxon: (n.) a sophisticated simulation and design program used by the brightest programmers to test the consistency of internal logic and memory. Management prefers to use games such as 'spreadsheet' for the same purpose.

