Atari Computer Enthusiasts of Columbus, Ohio Feburary 1986

ACEC

GIVES YOU MORE BANG FOR YOUR BUCK

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This newsletter is distributed for current ACE of Columbus membership. Dues are on an annual basis and entitle the members to all club benefits (Newsletter, Disk or Tape of the month, group discounts, etc.). Monthly meetings, at DeSales High School (Cafeteria) on Karl Road are open to nonmembers.

Upcoming meeting dates at 7:30 pm are:

March 10
April 14
May 12

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Feburary 10, 1986

Ace Membership,

Here we are already into the second month of 1986. Many new and interesting things are happening in the Atari computer world. The 520ST has already been taken out of the position of being Atari's newest computer. A model called the 1040ST has been anounced and supposedly shipped as you read this. The 1040ST will have a full Megabyte (1 million bytes) of RAM, a built in double sided disk drive and the TOS operating system in ROM. This will free up an additional 200K of RAM that currently is being used to house the disk loaded operating system. AT&T is taking the ST quite seriously and rumor has it that Atari and AT&T will put their heads together to market an ST workstation that would run on AT&T's Unix system.

The 8-bit's (800's, XL's & XE's) aren't being left out in the cold as far as new and exciting advances are concerned. Supra company has started shipping its long awaited 10 Meg hard drives, and I have heard that an 80 column capability will be built into the 130XEs soon. Optimized Systems Software has been working with the parallel bus on the 800XL & 130XE and found it possible to get transfer rates of up to 30K per second between a hard drive and the computer. Bill Wilkinson of OSS said this would make the RAM of the computer equivalent to the total capacity of the hard drive! Imagine 20 MegS of RAM...hard to conceptualize. New memory expansion projects are springing up for both the 800XL and the 130XE. You can have your 130XE expanded to 320K (see article in this issue) and your 800XL expanded to 256K (130XE compatible) for a fairly modest sum (and a little electronic assembly). The extra memory is capable of letting an 800XL use the new programs that were written for the 130XE (Atari Writer +, Basic XE, New Syncalc, etc.) as well as having one or more RAM drives available for super fast data storage and retrieval.

I think this will be an exciting year for Atari computers and their owners. ACEC will try to keep up with all the new and fascinating things that are taking place, but it is a big job and we could certainly use your help. All ideas and contributions will be considered very seriously. If you have any special areas of expertise or interest, please give some serious thought to sharing it with the rest of the club. This could be through an article, review or tutorial written for the newsletter, or a presentation given at one of the meetings.

Have you ever found yourself thinking someone ought to say something about some little known fact? Well, maybe that someone ought to be you!

Mark Shuter, EDITOR

ADVENTURE WRITER
Reviewed by Eric Anderson

You learn a couple of things real quick with Adventure Writer, and unfortunately not all of them are good.

Adventure Writer is one of the CodeWriter series of programs, and it promises "Your own adventure program the first time you try it."

And it's true, you can sit down and write an adventure program on the first go-round. In fact, nearly half of the 116 page instruction manual is devoted to doing just that.

What Adventure Writer's programmers don't tell you though, is that writing an adventure is lots of hard work. Oh, certainly, it's easier with Adventure Writer than if you were trying to write original code, but it's still not the easiest thing in the world.

Let's look at what it takes to complete an adventure using Adventure Writer. The very first thing you have to do is map out your adventure and plan exactly what will happen and when and where. Ideally, you'll complete this before you even turn the computer on. The map, as the documentation points out, is absolutely essential. If you don't have a map, you'll get hopelessly lost very quickly.

OK. With your adventure outlined the next step is to pop the disk in the drive and boot up Adventure Writer. The main menu is a rather daunting list of options from A-P, but you'll find you spend most of your time working in a couple of tables.

There are two major classes of actions you'll be working in. One set is tables. There is a status table, a vocabulary action table and a movement table. The other major catagory concerns words and messages. Thus there is a message text, a vocabulary text, and an object description.

Step 1 involves building your rooms. You create and write the location descriptions for each of the rooms in your adventure. In some cases, a location may have than one description, depending on the action taken. For the player, it all looks the same, for the computer, it is completely different.

Step 2 involves building the movement table. Once you have created the locations, you have to tell the computer how to move between them.

Step 3 is the object description phase. You begin creating objects that the adventurer will use or encounter. The next step, naturally is to put the objects in their

proper starting location.

With that done, you move on to creating vocabulary text: words that the player will use in interacting with your adventure. One particular hangup that the documentation mentions in an obscure place, but is vital to know is that you cannot use a word in the vocabulary action table unless you've previously entered it in the vocabulary text. That seems obvious, but it isn't quite that obvious when you're in the middle of plotting out the adventure.

The vocabulary text is something you add to continually as you work though the adventure. It seems like you'll always need a couple more words that you hadn't thougt about.

With all the groundwork laid, you're now ready to begin the work, constructing the adventure. Things happen in an adventure in two ways: because of something the player did, or because of the circumstances at the location.

For example, to have a player kill a troll, first you have to create the words "kill" and "troll" Then you have to give the player something to kill the troll with such as a "sword." Once you have created these words in your vocabulary text, you can then make an entry in the vocabulary action table regarding what happens when the player types in "KILL TROLL."

A sample entry for "KILL TROLL" might read: PRESENT 1 PRESENT 2 DESTROY 2 MESSAGE 10 SOUND 0 90 10 10 PAUSE 150 PLUS 30 50

In English that means: If Sword (1) and troll (2) are present. Get rid of troll (2) flash message 10 on screen (which might read The troll is dead) Make a little noise. Pause for a minute to let the player read all this and add 50 points to Flag 30 (Which is the player's score).

To complete your adventure, you have to create an entry such as the one above for every possible action you want the player to be able to complete.

The vocabulary action table is where the player interacts with the computer. At the same time, you have to complete a status action table which is the computer's way of interacting with the player. The status action table allows things to happen to the player, thus you can make an earthquake shake an adventurer who stands too long in one spot, or have a tunnel collapse the second time a player wanders through it.

Now that you have an idea of how much work is involved in creating an adventure, how well does Adventure Writer do its job?

The answer is quite well, after you get used to a few quirks. For one thing, although the manual is laid out as a tutorial, it's difficult to follow on occasion. For example, the vocabulary action table is discussed in no fewer than three separate places. The reference section isn't bad, but it could be laid out in a much more useful manner. (Finding what you need to know, isn't always the easiest.) But once you figure out how to work Adventure Writer, it is an extremely efficient program to operate.

My first adventure took about 20 hours of effort to put together. I think the next one will go together in a lot less time, maybe five or six hours, with most of that time spent in working out the plot.

I haven't used Adventure Writer to do anything extremely complex yet, but it looks like it has the ability to handle a far degree of complexity. (Obviously you can't write an InfoCom game, since the entire adventure is RAM resident.) The other nice part about Adventure Writer is that is creates assembly language code. Your adventure will run fast.

Is Adventure Writer worth the cost? Yes, if yu have the time you want to devote to writing an adventure. As the above illustrates it is more than a mere five minute chore.

The 130XE/320K upgrade, by Scott Peterson.

After both reading and building both the 800/288K upgrade(D.G.Byrd), and the 800XL/256K upgrade (C.Buchholz), I decided that there also had to be a way to upgrade the 130XE. There is, and thanks to the "Freddie" chip(CO61991) this modification is much easier to do than either of the other upgrades.

To do the upgrade you will need a soldering iron, de-soldering tool, and some fine wire. See the parts list for the chips needed.

First, remove both the case and the metal shield to get down to the mother-board. Then remove the eight ram-chip U26 thru U33(MT4264). They are the row closest to the TV RF module. Next, install Z2 thru Z9 in the place of U23 thru U33. These are the 256K ram-chips. You can solder them to the mother board, or use sockets. Now take a piece of wire approx 12 in. long and run a jumper from pin one on each of the 256K ram-chips to the next. After you do this the wire will be connected to pin 1 on Z2 thru Z9 and you should have about 6 inches left over. Do this on the rear of the mother board and

then snake the wire thru the large hole near the ram chips.

Next, desolder and remove U23(CO14795), and replace it with a 40 pin socket. Bend up pins 15 and 16 on U23 and insert it in the socket you just installed. Take Z1(74LS158) and bend up all the pins on it except pins 8 and 16. Put this "piggy-back" on top of U20(HD14050) and solder pins 8 and 16 of Z1 to pins 8 and 16 on U20. Now solder a short jumper from pin 15 on Z1 to pin 8 of Z1.

Now, take a piece of wire about 4 in. long solder one end to pin 30 on the chip marked "CO14805" on the mother board, and the other to pin 1 on Z1. Next solder a wire to pin 15(one of the two you bent out) of U23 and connect the other end to pin 2 on Z1. Solder a wire to pin 16 on U23 and connect the other end to pin 3 on Z1.

Take R1(33 ohm) and trim the leads to about 1/4 in. Take the wire you connected to pin one on the 256K ram-chips and solder it to one end of R1, solder the other end of R1 to pin 4 on Z1. Re-assemble the RF shield and case and you are finished.

PARTS LIST.

Z1	74LS158(2 to 1 Multiplexer)
Z2-Z9	41256 dynamic RAM(150ns)
R1	33 ohm 1/4 watt resistor
	1 40 pin socket
	8 16 pin sockets(optional)

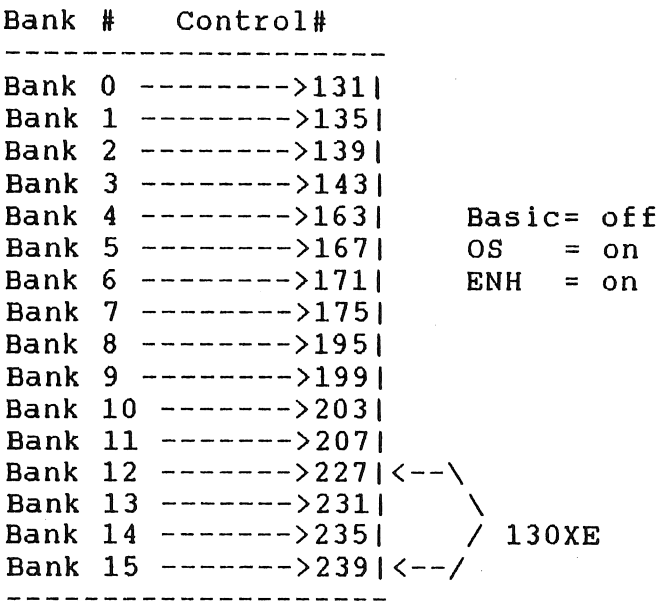
The next page is a quick over view of the bit table and numbers to be used in location 54017(PORTB). I have finished modifying a ramdisk handler for the extra ram. It uses a ram based OS so basic XE or XL can't be used. At present the best deal for this mod. is to use MYDOS 4.0. This supports a very large single density ramdisk. With basic XE you can use a 1500 sector ramdisk and without it you can have about 2000 sectors.

This upgrade has been built and tested on a BBS, it has run for days on end without a memory loss or error. If you need help or more information feel free to call the Peanut Gallery (408)-384-3906. 24HR, 300/1200 Baud. Leave mail to the Sysop (thats me). Good luck and let me know if you write a better handler.

Memory Control Register 54017($D301)
130XE/320K

Bit	7	6	5	4	3	2	1	0
	D	a	b	C	c	d	B	R

D=0 enable diagnostic ROM.
B=0 enable BASIC ROM.
R=1 enable OS ROM.
C=0 enable extended RAM.
abcd= memory control bits.



If you are using MYDOS 3.016 and wish to use Basic XE and a ram-disk at the same time, boot DOS and poke 5275,163 and 5324,16. Go to DOS and write the new DOS. This will keep the two from "bumping" into each other. A similar poke can be done to DOS 2.5, it is poke 4838,163. The handler I have will set up 192K of the extra ram as 2 SD ramdisks or 1 DD ramdisk.

If you are a hot-shot programmer (I'm not) I think a print spooler that uses part of this ram would also be very nice. This mod is easy to do and perfect for running a BBS. One note, on compuserve there is a mod by Rich Andrews which should not be confused with this one, his uses 33 new chips and mine uses 9 new chips. Have fun.

Scott Peterson

SOFTWARE UPDATE

4xFORTH is a full-featured Forth-language development system

published by the "Dragon Group". This product has been in shipment for over a month now, and has already been used to develop other products such as Express (see below).

Forth is a language often used by engineers for quick programming and for fast execution. New commands can be added by programmers, who quickly develop libraries of commands to extend the language for their own use. Despite its closeness to the machine level (which provides its speed), Forth programs are easy to debug, making it one of the fastest ways to produce efficient, compact programs that work.

4xFORTH is available in three varieties: End user LEVEL 1 with a suggested list price of $99.95, the enhanced End User LEVEL 2 package including GEM support which lists for $149.95, the FORTH Accelerators for even faster execution for an additional $75, and the Developer's System which sells for $500. A more complete description of 4xFORTH is included on the Forth Demo Disk (see below).

4xForth is available from the Dragon Group, 148 Poca Fork Road, Elkview, WV 25071. Telephone (304) 965-5517.

"EXPRESS" from Mirage Concepts is a letter processor with mail-merge and telecommunications features. Express is for the user who does not need a full-fledged word processor. It excells at producing form letters for mailing, with an easy-to-use mailing-list merge function and the ability to type envelopes. Express also includes a terminal mode which can capture and transmit text -- ideal for electronic mail applications.

EXPRESS lists for $49.95 and is available from Mirage Concepts, 4055 West Shaw, Suite 108, Fresno CA 93711. Telephone (800) 641-1441
(in California call (800) 641-1442).

"MINCE" is a owerful text editor for software developers. It was patterned on the popular EMACS editor used on DEC VAX minicomputers. Its many features include search and replace; cursor movement and deleting by character, word, line, sentence, or screen; a separate editing buffer; multiple windowing; column operations; transposing words and characters; and many others. Mince is not a word processor, it is a full featured tool that will be appreciated by program developers.

MINCE retails for $175 and is from Mark of the Unicorn, 222 Third Street, Cambridge MA 02142. Telephone (617) 279-5711.

Chat! is an inexpensive terminal program with full upload and download capabilities. Ideal for users of CompuServe and

local BBS systems, CHAT! supports both text buffer capture/transmit and Christiensen X-modem program transfer with error checking. CHAT! is very easy for new users to understand while providing the most essential features of terminal programs.

Users of CHAT! will be able to get the latest ST news and demo programs from Atari's own BBS (see below).

CHAT! retails for only $19.95 and is made by SST Systems, 3456 Willis Drive, Titusville FL 32796. Telephone (305) 269-0063.

"MUDPIES" is the first arcade-style videogame released for the ST. This is a habit-forming game that plays like a cross between "Food Fight" and "Robotron:2064". Working with either the ST's mouse or any standard Atari joystick, MUDPIES pits the player against characters that may be familiar from fast food commercials, to the tune of several ragtime songs.

Eight clowns (we nicknamed them Ronalds) chase you around the screen, tossing juggling pins at you. You grab mudpies and fling them at the clowns. Burgers, milk shakes, and what looks uncannily like McDonald's large fries are available when you get hungry -- but, in one of the game's most unique twists, eating too much is just as harmful as getting too little.

MUDPIES sells for $29.95 and is made by Michtron, 576 S. Telegraph, Pontiac, MI 48053. Telephone (313) 334-5700.

"FLIPSIDE" is a game based on the "Reversi" board games made popular by Gabriel's "Othello". This game for one or two players features a tough computer opponent, clever animation of playing pieces, adjustable strategy levels, and full use of the ST's drop-down menus.

FLIPSIDE lists for $34.95 from Michtron (see above for contact information).

Infocom has released three of its perennial favorite text adventures for the ST, with more on the way. The first ST adventures are "HITCHHIKERS GUIDE TO THE GALAXY" (based on the hilarious Douglas Adams radio shows, novels, and TV series), "ZORK I", the game that started Infocom and still one of the best dungeon text adventures, and the brand new "WISHBRINGER" magic adventure.

Players familiar with these games will be impressed by the response speed, thanks to the ST's super-fast floppy drives. Three games -- no waiting!

HITCHHIKER'S GUIDE, ZORK I, and WISHBRINGER have retail prices between $39.95 and $49.95 and come from Infocom, 55

Wheeler Street, Cambridge MA 02138. Telephone (617) 492-1031.

ST PUBLICITY

Creative Computing Magazine's October issue features the 520 ST in the cover story with the first review of this system in a major independent computer publication. Their reaction? Here are a few choice exerpts:

"Without question the most advanced, most powerful microcomputer your money can buy..."

"Fairly positioned to blow the Commodore Amiga right out of the water..."

The Atari ST delivers 75% of the splendor of the desktop interface at 25% of the price of a 512K Macintosh." [editor's note: everyone is entitled to an opinion, but we think the ST delivers 110% of the Mac desktop thanks to its speed]

Byte Magazine will present a serious in-depth report on the ST by the end of the year. We don't have any quotes from that one yet, but judging from the fights their editors have had over who gets to play with it next, it should be a goodie. Byte's Editor-in-Chief, Phil Lemmons, visited Atari's engineering and software departments in August and had this to say afterward:

"I visited Atari yesterday afternoon and got my first really good look at an ST520. I'm extremely impressed. Graphics are fast and first-rate. The most important thing is that all the i/o happens so fast. It's hard to believe that this is a low-end machine. I saw a terminal emulator and a rudimentary word processor; when there's a spreadsheet (and I saw two in development) I'll be able to do 90% of my work on an ST. Also saw a fine "Paint" program in development.[Editors note: VIP Professional is currently available and is an excellent spreadsheet.]

"Got a pretty good tour through the development labs, and can tell you that the 32-bit work station is not a myth. Also saw some clever refinements of the desktop on the ST520. Atari is really trying to deliver on its promise of "power without the price" and I think they're going to pull it off. There was no doom and gloom to be seen; indeed, considerable joy was evident about already having shipped 50,000 (Dec. 1985) machines...the ST520 is going to invigorate the drowsy marketplace."

For additional ST stories watch for stories in upcoming

issues of Personal Computing, Family Computing, Computer Gaming World, and Compute.

ST CONSUMER NOTES

What do consumers think of the ST? Here is a note from Steven Bubulsky that was posted on CompuServe:

"Well, I've had my ST for a month now, and was beginning to think that I might have made an error in not waiting for and buying an Amiga. Ah, victim of HYPE... I had a couple of hours with the Amiga today, and while the Amiga was good: nice graphics and all... It sure was not worth the price difference between it and a similar ST. I thought the INTUITION system screens were 'messy' to look at; GEM on the ST is much more pleasant to look at and work with. The monitor output on the ST seems cleaner to me. The fabled Mandrill picture on the Amiga was impressive, but the flicker was distracting. All of the sudden, this Atari ST looks awfully nice to me. I think I'll take the extra $1100 I just realized I saved and buy some nice software (what the heck; I can wait) and maybe a nice MIDI instrument to play with the ST. Nice work, Jack and Atari! I won't havta sleep with an inferiority complex."

And a letter to Atari Explorer Magazine from Joseph D. Calo:

"As a soon to be owner of an Atari 520ST, I thought that I'd write and say that it's about time someone -- Jack Tramiel et al -- come out with a state of the art computer at an affordable price. I've already sold my Commodore 64 system and can't wait to get the 520 home early next year. It's a fantastic machine! I'm looking forward to using it as a wordprocessor --the major reason for which I purchased a computer in the first place... Also, some of my friends have already or are selling their systems to purchase this unit. In fact, many that had planned to purchase the new Commodore 128, have changed their minds and have either already purchased it or will be purchasing the 520 in the future. Thanks again to Jack and to all thse who helped develop this excellent computer."

BUILD A RING DECTECTOR

Instructions provided by:
E & B COMPUTER SERVICES

NOTE: BUILD AND USE AT YOUR OWN RISK

Those of you who frequent bulletin boards probably have noticed that more and more boards have been popping up. This activity is probably based upon the fact that the necessary equipment to set up a BBS is becoming less and less expensive. In addition, running a BBS is the easiest way to meet other people who share your interest in ATARI computers.

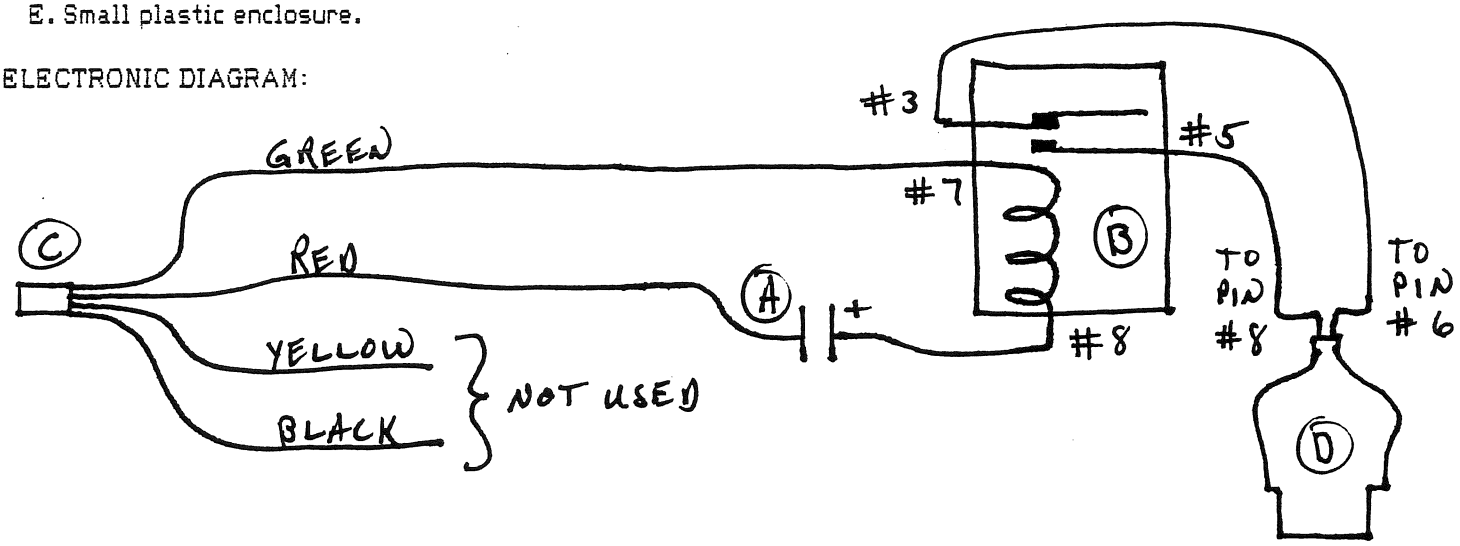
We consistantly receive questions on how to build a ring detector for use with a BBS. A ring detector is a device that provides your computer the means to know when the telephone is ringing. If the computer cannot detect the ring, it doesn't know a caller is trying to access the system.

A ring detector is a very simple electronic device, that is easy to build, requires only a few inexpensive parts available at most electronic stores, and provides reliable service with no maintenance. However, I should mention that correct wiring is critical if you want to prevent any dammage to your computer. If you are uncomfortable working with electronic parts, proceed very carefully with the following directions. The device you will end up with is not FCC approved, and could dammage your computer if not properly constructed.

PARTS LIST:

A. 22uf or greater capacitor. (Radio Shack #272-1014 or equivalent)
B. 125 volt AC relay. (Radio Shack #275-217 or equivalent)
C. Modular extension converter. (Radio Shack #279-364 or equivalent)
D. Atari joystick replacement wire or equivalent.
E. Small plastic enclosure.

ELECTRONIC DIAGRAM:



DIRECTIONS:

1. Connect the red phone wire to the negative (-) side of the capacitor.
2. Connect the green phone wire to pin number seven (7) on the relay.
3. Connect the positive (+) side of the capacitor to pin number eight (8) of the relay.
4. Use an ohm meter to determine which wires of the joystick replacement cable are connected to pin number six (6) and eight (8) of the joystick plug.
5. Connect the wire which leads to pin number six (6) on the joystick port to pin number three (3) of the relay.
6. Connect the wire which leads to pin number eight (8) on the joystick port to pin number five (5) of the relay.
7. Install all your work into the small plastic enclosure so that only the phone and joystick wires stick out.
8. You are now ready to plug the phone wire into the phone jack, and the joystick plug into joystick port number two (2) on your Atari.

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Central Ohio BBS List

Current Status May Vary

ANDES MESSAGE SERVICE.....253-1028
APOLLO II.....878-1481
APPLE TREE.*.....891-2647
ARMADA.....855-7230
A.C.E.C.***.....268-0405
ATARI.***.....481-0846
BADNESS.***.....836-5900
BANDIT.**.....895-7209
BULLET-80 (IRONTON).....1-532-6920
CAMELOT.....855-9459
CAT FUR.*.....855-9141
CHAT-A-RICK.....436-7744
COCUG.....274-6502
COLUMBIA CONNECTION.....864-8898
COLUSSUS RBBS.**.....263-0422
COMPU-NT.....261-7744
COMPU-TECH.....253-6136
COMPUTE.....239-7621
CROSS-FIRE.....879-6499
CRYSTAL PALACE.....443-7596
DARK FORTRESS.***.....899-9171
DELAWARE EXCHNGE.....1-363-1018
DR.DOWNLOAD (GRANVILLE).1-587-3774
ENTROPY.....866-4722
EUROPA.....833-1041
FIDO!.**.....461-1179
FOUR-B COMPUTER .***.....890-8966
GENEALOG.....488-4736
GREAT UNDERGROUND EMPI.**.471-2804
HIDALGO TRADING COMANY....899-0439
MARE.....855-1005
MARION.....1-387-3946
MICRO COTTAGE.*.....846-0200
MISCHIPS SOCKET.*.....861-0371
MODEM MANIA.*.....475-9791
NAMKOOB.....754-1971
NCC-1701.***.....837-1990
NOCHANGE #12 (WENDY'S)....764-6744
NOMADS.....882-1369
OHIO VALLEY.....1-423-4422
PACIFIC VORTEX.....459-9326
PHONEIX.....837-8717
RED PAVILION.....855-9141
RELAY.....1-397-3190
ROM CHIP.....235-6405
SAMURAI.***.....899-9476
SMALL WORLD.***.....875-2484
SPIRIT OF 99.....451-0880
TELEPORT 64.....299-5547
TEMPLE OF DOOM AE.*.....861-3948
TESSERACT.....436-1075
TODAY'S COMPUTERS.*.....436-0637
VILLAGE.....237-2791
WAREZ WORLD AE.*.....875-7399

COMPUTER TYPE - *** ATARI
THAT BBS IS ** IBM
RUN ON * APPLE

ACE OF COLUMBUS NEWSLETTER
P.O. BOX 849
WORTHINGTON, OHIO 43085

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