

EXPANDABLE

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THE

FINAL

ISSUE

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We would like to thank all of our subscribers for their assistance—without them this publication would not be possible.

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Dedication

by Darrell R. Sage

ECN Would never have come into being or continued as long as it has if it hadn't been for the influence and assistance of a number of people. This, the last issue, is dedicated to them.

The fact that I undertook a project such as this, I owe most of all to my father, Donald R. Sage, and my grandfather, Stephen R. Sage, who taught me that it is better to try something and fail than to not try it and have regrets later in life. I owe my wife a great deal for her assistance in producing the publication and for her support throughout these four years in making ECN a success. This publication took many long hours to write, assemble and distribute, and throughout all of those hours she worked with me and encouraged me to make ECN what it was.

The idea for ECN came from David Ahl (Creative Computing and currently publisher of Atari Explorer) and Jim and Ellen Strasma (the former publishers of the Midnight Gazette). During the days when the Midnight was published by the Strasmas it was a symbol of what an independent user publication should be.

Carol Quinn spent many hours helping us collate, staple, fold and stuff ECN. Jim Ketcherside spent weekends and evenings printing ECN and did so at a price that allowed us to have the lowest subscription rates around.

Our first subscriber contributions appeared in Issue #2. Those came from: Joe Blenkle, Jason Hirsch, Dick Jones, Nick Mucciariello, Kerry Takenaka, Harry McDonald and Richard Weiderman. Joe and Harry became major contributors to ECN in its early days and Joe continued to make many contributions until just recently. I spent many hours on the phone talking to Harry about upcoming products, particularly the modem. Harry spent many hours at the library and on the phone checking out background information on the ADAM and its evolution.

The first legitimate user groups were started by Harry McDonald of Charleston, Illinois, and Robert Marentes of Phoenix, Arizona. At last count there were over 60 of such groups currently in existence in the US, Canada, England and Australia. Many of those groups have been a valuable asset to ECN.

Other subscribers who deserve special recognition are Joe Blenkle (again) for many reviews, tracking hi scores, a telecommunications column and other articles; Jeff Silva; Steve Chamberlain; Maureen

Zabel; Ken Petersen; David Jacksch; Norman Castro; Raymond So; George Knochel; Mike Elsila; Francis Sifers; Al Roginski; Derrick Hall; Tommy Earnest; John Moore, who has provided many articles on CP/M and hardware projects as well as helping many ADAM owners with questions and problems; Tom Gilmore; Mike Degner; David Clark; and the many other contributors and subscribers who made all of this possible. I would also like to give special thanks to the 13 of the original 150 subscribers who are still with us.

This issue is also dedicated to the many Coleco Hot Line operators who took all those calls from ADAM owners and who worked hard to find answers without losing their patience; to the many Coleco employees who worked on the ADAM and were rewarded by being fired or laid off; and to the Coleco employees who ignored company policy and helped me get technical information about the ADAM. This issue is even dedicated to the Greenbergs who conceived the idea of a computer that would be inexpensive and easy to use. Many thanks to all of you who helped me do all of this.

Ramblings From The Ridge

by D. Sage

It's hard to believe that I've been doing this for over four years. Our first ADAM, a Colecovision Expansion module, was delivered in December 1983.

I started working with computers way back in 1967 or 68 at Southern Illinois University. I wrote my first program in PL/I and ran it on an IBM mainframe. In those days we worked with punch cards and did a lot of analysis on tabulating equipment. While at the university I worked for an outfit that did a lot of surveys. We tabulated our results using a sorter and then I would use a programmable calculator (a desk top Olivetti) to do all of the statistics. The programs were stored on mag cards. Later we got an early version of SPSS for the mainframe which is a statistical package that looks a lot like Fortran in the way it does things. I had to help test SPSS by loading data and calculating statistics using the various options. The calculations had to be manually checked to make sure the program produced correct results. In those days SPSS had a lot of bugs.

When I wrote my Master's Thesis, I had to punch all of my own data and lug that box of cards all over campus. Naturally, the key punch machines that were easy to get access to were located across campus from where we ran our jobs. Oh well, it was a learning experience that became valuable later on. When we moved to Missouri and I started to work on a doctorate, I quickly became involved with doing stuff on the computer again. Then when I went to work for

the state in personnel, I got a contract with the university for computer time so I could do some analysis necessary on my job. All we had in our office was tabulating equipment and when it came time to computerize, I was drafted. All of the initial software that was written for my office was done in Fortran. If you've never programmed in Fortran, you have really missed a great experience. It's not the easiest language to do things in, but it is very powerful and fast. You can't work with text very well, but you sure can manipulate data.

When Commodore first started cutting the price of the Vic-20, I decided to get one. It was great. I already had an Atari VCS for games, but the Commodore would let me program and learn other languages. Then Commodore came out with the 64 and I bought one of the first ones on the market in my area. It dies just before the warranty period was up, so I got a replacement which is also dead now. I started out writing a few reviews for the Midnight Gazette and even did a lot of the revisions to the HES Writer manual (HES went bankrupt later during the glut of 64 software that developed). When I first saw ads for Colecovision, I knew I had to have one.



Coleco had already indicated they would have a keyboard for it and that sounded like a pretty good deal. By then I had learned a little assembly language programming and

thought that the Coleco system would be a good one for doing some software development.

Coleco wouldn't cooperate. They ignored my letters and calls. Nevertheless, I felt the system had potential. I had subscribed to the Midnight Gazette for the Commodore computers for some time and finally decided that there would be a need for a similar publication for Coleco's computer. When the ADAM was finally shown in early 1983, we decided to go ahead with a publication and here we are.

ECN has grown and changed throughout these four years. When it started, it had a subtitle, "An Independent Newsletter for the ADAM and Other Computers." Originally I had planned to keep things open ended and to cover other home computers as well as the ADAM. As things went on, it became obvious that it would require a great deal more time than I had available to cover anything more than the ADAM and do it justice. That decision, it turned out, meant that ECN lived and died on the basis of ADAM's success or lack of it. Coleco decided to drop ADAM in 1984 and ECN still managed to last another

three years. Other "ADAM" publications managed to attract more subscribers than ECN, but ECN did publish - and on a relatively regular schedule.

Unfortunately, our advertising probably reached only between thirty and fifty thousand of those who bought ADAMs and at our peak we had about 1500 subscribers. If we could have reached more ADAM owners, we could have had a much larger subscriber base. Nevertheless, we feel that we have done as much and in many cases more than our competitors in providing our subscribers with support. Garden of ADAM had nearly two thousand subscribers at its inception and only produced one issue (and to my knowledge refunded no subscriptions). AUGMENT started almost a year after ECN and at its peak had over 5,000 subscribers. Yet, they lasted only two years. Serendipity, I believe only produced three issues of their newsletter.

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PACKCOPY V1.0
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REMOVE PACKCOPY NOW

OPTIONS:
1 - Copy Data Packs ONLY
  - Copy between disk & DDP
  - Copy between disks only
  - Quit
  - Return to main copy menu
```

During our existence we produced the first public domain software for the ADAM. That software has been distributed widely by groups all over the US and Canada. We produced the first and

the largest selling copy utility (PACKCOPY). Our utility to read other disk formats (CONVERT) was used by AUGMENT to create their ADAM CP/M public domain software library and they used PACKCOPY to duplicate much of their library. All of this has been a lot of work, but it has also been a lot of fun. We have made friends with people all over the US, Canada and even England and Australia. Some of you have called and talked with us, not just about business, and many others have written. I hope that you will continue to keep in touch and let us know what you're doing. Who knows, if we are ever in your town, we might call and drop by. Which reminds me. I want to thank those of you who have invited us to visit you or stay with you in Chicago and Las Vegas. Some day we may take you up on that.

Where do we go from here? Well in the short run we plan on remodeling our house. I started that project about seven years ago and it's time to get going on it again. I plan on spending this spring outside walking through our woods and fields and doing a little gardening. I haven't done any woodworking in a while and I hope to have time for some of that too. We also want to travel. My wife has never been to Colorado, so hopefully we will get out there and I would like to go back down to the Smokey Mountains again, then maybe to California and Washington eventually. No, not all in one year.

I recently received a promotion at my regular job and that involves responsibility for expanding our current level of automation throughout the office. With all of that, I doubt if I will do much computing at home except for recreation or learning. I still want to learn more about the hardware and become proficient in some of the languages I have been learning. As time permits I may do some freelance writing, but probably not for a while. It's time to take a break and work at only one job. It's been a while since I did that and when I look in the mirror it shows.

I guess this is finally the end. We will miss ECN and we will miss seeing your names on the labels as we put them on for the last time. We will also miss your calls and your letters. It has been a great four years and we have enjoyed it. You have made this possible and we thank all of you for supporting us and sharing your thoughts, articles, suggestions and problems with us. Maybe someday there will be a Ramblings From The Ridge again. See you then.

IMPORTANT NEWS: REFUND POLICY

No we didn't forget. For those of you whose subscriptions run past this issue (#24), you will find in your envelope a refund check covering payment for any issues for which you subscribed beyond #24. The refund is prorated, that is the individual cost of an issue is \$2.50 when purchased through a subscription. If you had one issue left on your subscription (it would have run through issue #25) then you received a check for \$2.50; two issues - \$5.00 and so on.

Unlike other publications we are not fading away without notice. We are refunding any outstanding payment, not ignoring it or arbitrarily substituting something you didn't want in place of it. Since we are discontinuing the publication, we feel it is our responsibility to return your money. To our knowledge, we are the only publication that has done so. Of course if you don't want the refund that is your business.

Thanks for the business. We hope you have enjoyed ECN.

Industry Observations

by D. Sage

In spite of the "crash" on Wall Street, consumer electronic sales continue to increase with computer sales outrunning other consumer products. Computers continue to do well and while they will have their ups and downs, they are becoming a necessity for an increasing number of businesses.

IBM's PS/2 and its new operating system continue to be greeted with pessimism. Sales of competing XT and AT compatible machines running MS DOS

continue at a high level. Sales of Compaq and other compatible PCs continues to increase at IBM's expense. While the larger companies are banking on the PS/2s, many smaller companies don't like changing horses in midstream. There continues to be doubts as to whether the new operating system will provide any real advantages. IBM introduced the PS/2 line as part of their move to integrate all of their hardware from PCs to minis to mainframes. Some see this as positive for IBM in the long run, but doubt the value of such a move so far in advance of the availability of the new operating system. That OS is supposedly very large, buggy and slow on the new systems. True the PS/2s can run PC DOS, but so can all the compatibles. The clone makers have already solved the problem of producing PS/2 compatibles and will do so only if it appears to be a profitable move.

IBM is big, but they are not infallible. Remember Jr. Until IBM can provide businesses and consumers with useful reasons to make the change, I doubt if there will be any stampede to buy the new systems and their OS. If you don't need to hook it up to a bigger IBM system, then why buy it?

Apple is continuing to make inroads in the business market even among the larger companies. Look for this to continue.

In the home market, Atari continues to do battle with Commodore. The only problem is Atari seems to be firing all of the shots and winning all of the battles. Where is Commodore's big ad campaign? Will Commodore be able to move the Amiga into the business market or will it fail there and also lose the home market completely to Atari and the cheap PC compatibles? Commodore recently selected a new manager to run the company. My guess is it's too late. They should have kept Rattigan. It will be hard for them to recover the ground they lost when he was fired.

Amstrad has been quite successful in the PC compatible home market. Their U.S. sales have continued to grow and they recently bought out their US distributor in order to have greater control over marketing and distribution. Atari also bought a west coast computer chain in order to enhance their distribution and service network.

The video game market is also expanding. Nintendo, with an early start, continues to hold the lead. They have released a large number of games going into the Christmas season and many third party companies have games on the shelves or soon to be released. Sega's sales are growing and Atari and the revived Intellivision are selling also. They key will also be the availability of a variety of quality games. Release of older games is not sufficient to interest

the public. In that respect, Nintendo and Sega have the greatest variety and some of the highest quality of games outside of computer based games.

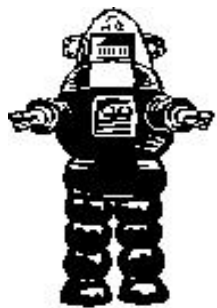
As the cost of copy machines continues to drop, look for laser printers to get cheaper also. Laser printers of course cost more because they have a cpu and a lot of memory, but these are getting cheaper and that will bring down the cost of the printers as well as the heavy competition that is developing. It won't be long until multi-color laser printers become readily available. Now the prices are out of sight.

Well, this column has come to an end. Elsewhere in this issue you will find my views on what awaits us in the future.

Future Computing by D. Sage

What will tomorrow bring? That's a pretty broad question. Let's restrict the question to what will happen with computers in the future? Particularly, let's look primarily at computing in the home.

Obviously computers are going to continue to be cheaper. Tomorrow's dollar will buy a lot more computing power than today's. Six years ago you could buy a 16K eight-bit computer with no drives or accessories for about \$300. Four years ago you could buy a 64K eight computer for about \$300 and that price declined to around \$150. You can now buy a one megabyte sixteen bit computer for around \$700. One "K" of processing power has gone from



about \$20 to around seventy cents in just about six years time. At the same time the processing speed and power of the cpu has increased dramatically. In two or three years, the price will be about twenty cents per K and cpus will be full thirty-bit.

Home computers with multiple processors will soon become common. As processors become faster and cheaper, their use will expand. Uses for computers will become more varied. The availability of cheap laser disk drives will make available inexpensive and easy to use data bases. But, the real growth in the use of computers in the home will come in the area of robotics.

A few years back everyone thought that the home robot industry was on the verge of exploding. Not just yet. Robotics requires a degree of intelligence that is not yet available at affordable costs. Useful home robotics requires lots of memory, multiple processors and parallel processing capabilities that have not yet arrived. These problems could be solved in the next five years, but will likely not begin to have any impact until we approach the twenty-first century. Robots

that wander aimlessly, do simple tricks, and require complex programming by the owner will never be successful. Part of the progress in this area will be dependent upon low cost, light weight, long lasting rechargeable batteries.

Robots will have to be smart enough to understand a wide range of verbal commands. They will have to be smart enough to learn their environment rapidly using something other than the slow trial and error method currently in existence. Robots will also have to be capable of doing something useful; they will have to go beyond the current stage of being simply expensive toys. Most of the advancements in this area will come from the development of aids for the handicapped. Robots will learn to "listen" for doorbells and telephones, notifying the deaf owner that someone is calling and translate the caller's voice into a visual display. They will learn to monitor the well being of an invalid or aged owner, taking automatic action to seek help if something goes wrong. They will learn to cook and feed the quadraplegic. They will allow the blind to see and the mute to speak. Developments are already coming rapidly in these areas, but many of them are still awkward, slow and expensive. Many of these developments do not appear initially relevant to robotics, but they are critical to the advancement of that field.

Our image of robotics will change from that of a tin can on wheels to a variety of automatic immobile household aids. We already have programmable thermostats. Soon we will have smart houses that will be able to route heating or cooling to only those areas of the house where there are people, reducing the waste of scarce resources. Many appliances and power tools are already smart. They apply only the power necessary for a particular job, applying less power when there is no load and more power when the load is increased. Washing machines will be able to determine how dirty your clothes are, and will add the right amount of detergent, agitation, and select the appropriate water volume and temperature. Everything in the home will have built in diagnostics. Before something wears out you will be notified of the specific problem and its solution. Some appliances may even be capable of diagnosing and repairing a problem.

Yes, eventually there will be the traditional trash can shaped robots. Or at least something like that will be mobile. They will clean your floors and dust your house without breaking anything. Some day they may even be capable of doing your shopping. They will inventory your food supply and keep track of necessary home maintenance. They will mow your yard and vacuum your leaves. They will be able to

communicate verbally and in an intelligent fashion. You won't have to move the furniture, they will do it for you. They will troubleshoot various problems using a broad and diversified data base. They will babysit, entertain and educate your children. Ultimately their capabilities will be limited only by our ability to dream up new applications.

Many of these developments will come in the next 20 years. At first they will be available to only those who can now afford a home computer. Home computers will become inexpensive enough for even the poor to have and use. The industry will continue to grow. The necessity for programmers will decline as large development systems become more efficient. The real need will be for people with ideas and the ability to translate those ideas into practical useful applications. The computer will program itself or design other computers capable of carrying out new functions efficiently.

Computer games will stretch the imagination. They will be able to tailor their difficulty to the skills of the player. They will be more interactive and more interesting. Shoot em ups will still exist, but they will be more realistic. Graphics will continue to improve until they far exceed current levels of resolution and speed. Even television viewing will be more interactive. Viewers will become participants in some shows without leaving their living rooms. Nevertheless, 3D movies will probably still not catch on.

All of these new developments will raise a variety of social and ethical issues that we will have to resolve. All of this new technology will have its disadvantages as well as its advantages. It will be our responsibility to see that our technology is managed carefully and for the benefit of our society and the rest of the world and that it not be abused and used for destructive purposes. Remember that the industry that gave us our computers also produced some of the worst pollution that we have ever had to deal with. In the future let us hope that we all learn to manage our technology wisely and that we don not sacrifice our environment and human lives in order to reap the possible benefits.

Bulletin Board

■ **FOR SALE:** ADAM with dual data drives, disk drive, 64K expander, modem, CP/M software and more. Contact: Rick Faulkner, P.O. Box 3066, Fairview Heights, IL 62208. Phone (days) 314-727-0005 or (nights) 618-397-2432.

■ **WANTED:** Vectrex Brand game system and software. All letters answered. Contact: John Bonavita, P.O. Box 320, St. Bonaventure, NY 14778.

■ **FOR SALE:** Brand new ACTIONMAX VCR Game

System plus two new games. All \$50.00 postage paid. Contact John Bonavita, P.O. Box 320, St. Bonaventure, NY 14778.

■ **FOR SALE:** List #21 of ADAM used and PD software in all three formats (ROM, Disk, & DDP). All at huge savings! For list send SASE to John Bonavita, P.O. Box 320, St. Bonaventure, NY 14778. We do not sell pirated software.

■ **FOR SALE:** Nintendo Robot (only) and Gyromite game - \$25, Exciteabike for Nintendo - \$10. All three items for \$30. Contact: Joe Blenkle, P.O. Box 41746, Sacramento, CA 95841

■ **FOR SALE:** (ATARI ST Software) Winter Games, Sundog, Music Studio, Starglider and Copy II ST. \$10 each. Joe Blenkle, P.O. Box 41746, Sacramento, CA 95841

■ **WANTED:** Anyone who has an IBM-ADAM combination unit from ADAMLand. Price is negotiable. Also I have SmartFiler and Search for the Ruby Chalice (ADAM updated versions) \$10 each or both for \$15. All manuals are included. Send SASE to Guy Bona, 1824 Wesley Ave., Berwyn, IL 60402.

■ **FOR SALE:** Fiberglass enclosure covers for ADAM power supply that is used without printer. Protect it from dust, spills, and fingers. Price is \$15.95 plus \$2.50 shipping and handling. For info send a SASE or send check or money order to Robert Kologe, 56 Woodruff Ave., Thomaston, CT 06786. Phone (203) 283-9631.

SPECIAL SALE

Over the last several years I have accumulated a great deal of hardware and software. Some of these products were purchased for review and received only limited use. Others are new and others have been used regularly, but were in working condition the last time they were used.

Many of the items include their original packaging and all come with their original instructions and necessary software, if any was originally included with the product.

The status (usage) of each product is included in the product description. Orders will be filled on a first come, first served basis. To simplify filling orders and or returning payment if necessary, please include a self-addressed stamped envelope.

Payment should be check or money order made payable to Sage Enterprises and addressed to Sage Enterprises, ATTN: Special Sale, Rt. 2, Box 211, Russellville, MO 65074.

Because of the holidays please allow 6 to 8 weeks for delivery.

Shipments will not be made until personal checks have cleared, but we will make every attempt to

expedite shipping although we have other commitments during these holidays that may cause some delays. Shipping costs are included in all prices.

PRODUCT DESCRIPTION

| | |
|---|------------|
| The First Book of ADAM, by A. Dent | \$ 7 . 0 0 |
| Make-a-Face, Cart, Spinnaker | \$5.00 |
| Logic Levels, Cart, Fisher-Price (new) | \$ 5 . 0 0 |
| Learning With Leeper, Cart, Sierra (limited use) | \$ 5 . 0 0 |
| JukeBox, Cart, Spinnaker (limited use) | \$6.50 |
| Fraction Fever, Cart, Fisher-Price (limited use) | \$ 5 . 0 0 |
| Dance Fantasy, Cart, Fisher-Price (New) | \$ 5 . 0 0 |
| Cabbage Patch Kids-Adventure in Park (new) | \$5.00 |
| Family Feud, DDP, Coleco (limited use) | \$10.00 |
| A.E. and Choplifter, DDP, Brodebund (LU) | \$10.00 |
| Smartfiler, DDP, Coleco (LU) Update Version | \$10.00 |
| FlashCard Maker, DDP, Coleco (new) | \$10.00 |
| ADAMLink Modem w/AdamLink 2 software | \$40.00 |
| ADAM Daisy Wheel - Pica 10 (new) | \$ 3 . 0 0 |
| ADAM Serial/Parallel Printer Interface with software & serial cable, Eve Electronics, (limited use) | \$60.00 |
| ADAM 64K Memory Expander, Coleco (new) | \$40.00 |
| ADAM Keyboard in case, Coleco (new) | \$12.00 |
| ADAM Keyboard without case, Coleco (new) | \$ 7 . 5 0 |
| Olivetti Jet Ink Printer with extra ink cartridges, Centronics (parallel), (limited use) | \$80.00 |
| Atari VCS Barely Used - old style, Atari | \$25.00 |
| Victory Data Packs (Box of 10) | \$15.00 |
| ADAM Data Drive (New) | \$15.00 |
| ADAM Data Drives (Used) | \$17.50 |
| (LU) - Limited Use | |

FOR SALE: Two ATARI ST Single Sided Disk Drives - \$105 each. Like New. Joe Blenkle, P.O. Box 41746, Sacramento, CA 95841

*Goodbye and Thanks
to Everyone...*

*The
End!*



**In closing I thought you might like to know what we look like. This picture is a couple of years old and was taken at the St. Louis Zoo. I'm the one with the beard. We would like to wish all of you a happy holiday season and a prosperous new year. Good Luck! --
*Darrell & Shirley Sage***

