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Issue #88 - May / June 1992

Editors: Lyle Marschand & James Notini

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Continuing our study of John Chapter 16 . . .

'I have said all this to you to keep you from falling away. ² They will put you out of the synagogues; indeed, the hour is coming when whoever kills you will think he is offering service to God. ³ And they will do this because they have not known the Father, nor me. ⁴ But I have said these things to you, that when their hour comes you may remember that I told you of them.

"I did not say these things to you from the beginning, because I was with you. ⁵ But now I am going to him who sent me; yet none of you asks me, 'Where are you going?' ⁶ But because I have said these things to you, sorrow has filled your hearts. ⁷ Nevertheless I tell you the truth: it is to your advantage that I go away, for if I do not go away, the Counselor will not come to you; but if I go, I will send him to you. ⁸ And when he comes, he will convince the world of sin and of righteousness and of judgment: ⁹ of sin, because they do not believe in me; ¹⁰ of righteousness, because I go to the Father, and you will see me no more; ¹¹ of judgment, because the ruler of this world is judged.

¹² "I have yet many things to say to you, but you cannot bear them now. ¹³ When the Spirit of truth comes, he will guide you into all the truth; for he will not speak on his own authority, but whatever he hears he will speak, and he will declare to you the things that are to come. ¹⁴ He will glorify me, for he will take what is mine and declare it to you. ¹⁵ All that the Father has is mine; therefore I said that he will take what is mine and declare it to you.

¹⁶ "A little while, and you will see me no more; again a little while, and you will see me." ¹⁷ Some of his disciples said to one another, "What is this that he says to us, 'A little while, and you will not see me, and again a little while, and you will see me'; and, 'because I go to the Father'?" ¹⁸ They said, "What does he mean by 'a little while'? We do not know what he means." ¹⁹ Jesus knew that they wanted to ask him; so he said to them, "Is this what you are asking yourselves, what I meant by saying, 'A little while, and you will not see me, and again a little while, and you will see me'?" ²⁰ Truly, truly, I say to you, you will weep and lament, but the world will rejoice; you will be sorrowful, but your sorrow will turn into joy. ²¹ When a woman is in travail she has sorrow, because her hour has come; but when she is delivered of the child, she no longer remembers the anguish, for joy that a child is born into the world.

²² So you have sorrow now, but I will see you again and your hearts will rejoice, and no one will take your joy from you. ²³ In that day you will ask nothing of me, Truly, truly, I say to you, if you ask anything of the Father, he will give it to you in my name. ²⁴ Hitherto you have asked nothing in my name; ask, and you will receive, that your joy may be full.

²⁵ "I have said this to you in figures; the hour is coming when I shall no longer speak to you in figures but tell you plainly of the Father. ²⁶ In that day you will ask in my name; and I do not say to you that I shall pray the Father for you; ²⁷ for the Father himself loves you, because you have loved me and have believed that I came from the Father, ²⁸ I came from the Father and have come into the world; again, I am leaving the world and going to the Father."

²⁹ His disciples said, "Ah, now you are speaking plainly, not in any figure! ³⁰ Now we know that you know all things, and need none to question you; by this we believe that you came from God." ³¹ Jesus answered them, "Do you now believe? ³² The hour is coming, indeed it has come, when you will be scattered, every man to his home, and will

leave me alone; yet I am not alone, for the Father is with me. ³³ I have said this to you, that in me you may have peace. In the world you have tribulation; but be of good cheer, I have overcome the world."

This passage is a continuation of Jesus' special teachings given to his disciples immediately before his arrest and eventual crucifixion.

Remember that Jesus is saying these things to his disciples BEFORE his death. He is basically telling them what is going to happen in the future, which they probably didn't understand (or believe if they did understand). However, as these things did come to pass they were recorded in the Bible that we all might believe that Jesus was the Son of God, because he knew the future. **Jesus even told his disciples that he was going to be killed and raised from the dead long before it happened.**

In the passage beginning in verse 16 above, Jesus is telling his disciples that first he will be gone and then he will return and they will see him again. Here he is telling them that it will appear that he is gone for good (when he dies on the cross), and they will be very sorrowful and weep but that following this period they will rejoice because he will be back with them (after his resurrection from the dead).

Again, this was very confusing to them at the time, but this is exactly what happened. When Jesus was sentenced to death and apparently died on the cross, his disciples thought it was all over - that Jesus was dead and that was that.

They, like all of us, think of death as final - there is no return. Even though Jesus told them he would return after 3 days, they still thought his death was final and wept and lamented. Even when Jesus did appear to them, they could not accept his resurrection at first. We are all "doubting Thomas" from this perspective.

Jesus explained that he was going to the Father and that all men could pray to the Father in Jesus' name and their prayers would be answered if they believed in Jesus and who he is. **This is a very important point. God sent His one and only Son to earth to teach all mankind about His love for them and His plan for salvation through Jesus. Only those who accept Jesus for who he is and hence receive him as their Lord and Saviour will have a direct relationship with God the Father and have the benefits of that relationship (eternal life and blessings beyond belief).**

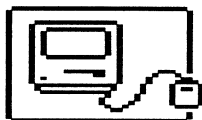
The basic purpose of Jesus' ministry on the earth was to reestablish mankind's relationship with God the Father. Our original relationship was broken by disobedience (sin) and only through the sacrifice and death of a sinless person (Jesus) could that disobedience be accounted for so we could be reunited with God the Father.

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N.I.A.D. PROCEDURES



⇒ N.I.A.D. is published monthly, except for the months of May / June and July / August, which are combined issues by the Northern Illiana ADAM User's Group. Individual issues may be purchased for the current month or a backissue for \$3.00 (always check Product List for current pricing). The May / June issue of N.I.A.D. is the 88TH issue published by N.I.A.D., there are 87 preceding issues. When ordering backissues, please specify the number of the issue, month and year.

⇒ The standard membership rate for 10 issues is **\$22.00 USA First Class** and **\$26.00 Canadian First Class** and **it's possessions**. Contact us for membership rates outside of these areas.

⇒ N.I.A.D. welcomes contributions of original reviews, programs, articles, questions, suggestions and comments. Please include a SASE (Self-Addressed-Stamped-Envelope) if you want a written reply. Also, any contribution sent in on DDP or DISK will be eligible to receive a Public Domain program or volume in return at no charge!

⇒ Your N.I.A.D. member ID number is on the first line of your mailing label (affixed to the newsletter). The first four digits are the month and year of the final issue in your current membership. Please check this number each month to insure that issues are not missed.

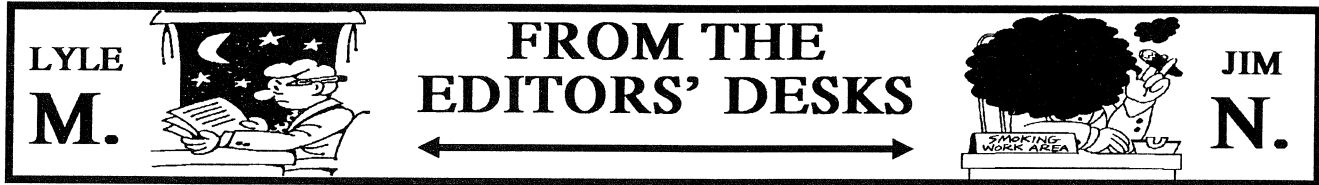
⇒ N.I.A.D. will not be held liable for any issues missed due to an address change which we are not informed of. Please send this information to us as soon as possible so as not to cause any type of difficulties. Also, include your member ID number any time that you send us any kind of letter, package or order.

⇒ N.I.A.D. accepts advertising for ADAM related products and services. Cost is \$35 for a half page ad and \$60 for a full page ad for one month. Contact us for multi-issue discounts. Well over a thousand ADAM owners receive our newsletter each month and many more get to see it second hand. You may send in your ad in either SmartWRITER, SpeedyWRITE, PowerPAINT, PrintWORKS, other ADAM formats, IBM ASCII or IBM PUBLISH IT! DTP format files or even supply us with a high quality print out for reproduction in the newsletter. N.I.A.D. reserves the right to not advertise certain products or services which may be offered.

⇒ If **0592** or **0692** are the first four digits in your member number, this is the last issue you will receive in your current membership, it is time to renew your membership to insure that you do not miss an issue.

⇒ N.I.A.D. welcomes software developers to submit their programs for us to evaluate for possible commercial sale. Send in your products for us to test and to review in the newsletter. N.I.A.D. offers a 50 / 50 split of the sale price on all items that we handle distribution of for all developers. You will find that this is one of the best offers around in the ADAM community. We will also publish a review on the product as soon as possible and handle distribution of demo copies.

⇒ **We have exercised due care in the preparation of this newsletter. No warranty, expressed or implied with regard to the information contained herein is given, either by interpretation, use or misuse. The opinions expressed herein do not reflect those of the editor or staff unless noted.**



(... Continued from front page)

Once we confess our sins and accept Jesus' sacrifice as the price for our sins God the Father no longer sees our sin, but He sees His Son Jesus whose death on the cross has made us pure and holy in God's sight.

Note in verses 7 - 10 that Jesus explains that the role of the Counselor (Holy Spirit) is to convict the world of sin, righteousness and judgment. Do you ever feel something inside telling you not to do something? Sometimes referred as our conscience, I think this is God, through His Holy Spirit, trying to guide us away from sin. However, God has given us all a free will to make our own decisions so we have to decide to follow what is right or wrong. Again, if we do something we know is wrong God through His Holy Spirit will make us realize that we made a mistake which gives us the opportunity to confess our sins and ask forgiveness for them.

If we try to take the time to listen to God, we can prevent many problems and hurts in our lives. There is a constant struggle between God within us and our flesh, which wants to do whatever it wants, being disobedient to God. We can guard against this if we listen for Gods help through our conscience.

What a wonderful gift God has given to ALL of mankind - the opportunity to be forgiven, not matter what sins were committed. This gift is available equally to every person with no strings attached, that is why it is so fair. No one is left out, no matter what their condition - all you have to do is believe and accept the gift of grace.

Won't you accept this gift today ?

God bless you all.

Well, my son graduated from High School this last weekend. What a milestone and what alot of work to put together a graduation party. I took off work the week before and ended up working the whole week. I don't know why, but I decided to stain by deck and some portions of the house I didn't finish last year. What a mistake!! I underestimated the amount of work and didn't finish until Friday. Oh well, live and learn (although, I keep doing the same thing over and over).

As we mentioned last month we are closing the store. Effective June 15, N.I.A.D. will be relocating to the following address and also the new phone number will be as follows:

**N.I.A.D.
8125 W. Catherine
Chicago, IL. 60656
(312) 775-0409**

All mail correspondence should be sent to this new address however, if you have recently mailed anything to our P.O. Box 1317 don't worry, we will still get it. As far as phone calls, the 961-5011 and 3529 lines have been disconnected, but the "3529" number will give you a recording with our new number.

Low and behold, this issue is actually out on time! Yes, after nearly eight months of late issues I have finally been able to get one into your hands on schedule for a change. And, oh, what an issue it is thanks largely in part to the fabulous service provided by The ADAM News Network. I can't remember what it was like prior to A.N.N., but I can tell you that the service they provide for the ADAM and editors of ADAM newsletters like myself is invaluable. Each and every month I receive (from Bart "Zonker" Lynch) the A.N.N. floppy 5 1/4" disk with a pot-pourri of tremendous articles that I may peruse for use in the creation of the N.I.A.D. Newsletter. This, in turn, is the main reason why I was finally able to get back on publication schedule for a change and will in the future have more time to write articles for the newsletter and contribute to A.N.N. My hats of to the folks at A.N.N. (Barry Wilson, Dean Roades, Ron Mitchell, Bart Lynch, etc., etc., etc.) and also to all the great ADAMites in the U.S. and Canada who contribute so much of their time writing articles and workshops for the ADAM and share them freely for all to use and learn from. The spirit of ADAM is truly alive!

And hot of the press... the Chicagoland area now has a FIDONET BBS of our own! Yes, after nearly two months of contact with Chicago Syslink's Sysop George Matyaszek, he has agreed to pick-up the National ADAM Echo Conference! Chicagoland ADAMites can now call up Chicago Syslink (local call, no long distance or toll) and have access to the ADAM Echo just as numerous other ADAMites in other states and in Canada currently have. There are about 30 Fidonet BBS's around North America that are carrying the ADAM Echo (also one in England!) and a large contingency of ADAM experts available for you to interrogate with questions, so don't pass up this opportunity. Remember, the more national attention the ADAM receives, the stronger it's support will become, thus assuring you of many more years of support and new products. Don't be shy, call Chicago Syslink today and tell George that you heard about them from N.I.A.D. The BBS is very easy to use and navigate around and not only will it provide valuable ADAM information, it will also provide a information pertaining to a wide range of subjects that I haven't even had time to explore yet (this will be covered in a future issue). Note that the BBS phone number has changed due to their recent move.

**CHICAGO SYSLINK
SYSOP: George Matyaszek
(708) 795-4442**

ADAMCON 04 is right around the corner. If you haven't already sent in your registration, DO SO IMMEDIATELY! Stop procrastinating like I have done and get the payment in, I JUST DID!

Last but not least, our recent move has left us with some extra ADAM equipment that we are no selling, see the list below - FIRST COME, FIRST SERVE!

- ⇒ 5 1/4" 160K COLECO FLOPPY DISK DRIVE\$129.95
- ⇒ 3 1/2" 720K COLECO FLOPPY DISK DRIVE\$179.95
- ⇒ EXP. MOD. #3 WITH COLECOVISION, 2 DATA DRIVES..... \$129.95
WITH CONVERTED OUTPUT FOR MONITORS
- ⇒ MAGNAVOX 13" RGB/COMPOSITE MONITOR - NO SOUND. \$109.95
- ⇒ ZENITH DATA SYSTEMS 13" RGB/COMPOSITE MONITOR... \$139.95
- ⇒ EVE PS-1 ADAM POWER SUPPLY \$49.95
- ⇒ COMPLETE ADAM COMPUTER SYSTEM \$169.95

As we are a little limited for space in this issue, please call if you need any further details on the products which are listed above. They are all in good condition and come with everything needed to hookup (IE: monitor cable, software, etc.).

N.I.A.D. NEWS & UPDATES

⇒ **N.I.A.D. MEMBERS** should note that the next issue to be published is the combined July / August issue. This particular issue will be mailed in the middle of July and will be a combination newsletter and product catalog with full descriptions of each and every product N.I.A.D. has available for the ADAM. Also, make note of the fact that N.I.A.D. will be moving in the middle of June (June 12-14) from our store location to a new site which has yet to be determined at this time. The store address of 6458 College Rd. will no longer be valid so please send any correspondence, product returns, etc. to our P.O. Box address which will remain unchanged. The N.I.A.D. phone number of (708) 961-3529 will hopefully remain the same, but our store phone number of (708) 961-5011 will no longer be in service. Further details will follow in the July / August issue after the move is completed.

⇒ **FILE MANAGER V3.0** has been released by Tony Morehen of AJM Software. This new version contains a number of improvements and fixes to minor bugs over V2.x, but still does not contain all the new options mentioned (V3.1) a number of months ago due to time constraints on the part of Tony. File Manager V3.1 will be available later this summer and for this reason a review will not be made available until V3.1 is released. Those who purchase V3.0 will receive one free upgrade to V3.1 through ADAM's House when it is completed. Owners of V2.x may upgrade to V3.1 for \$10.00 through ADAM's House and it will be shipped when available (proof of purchase or the original disk or data pack is required). File Manager V3.0 is now available through N.I.A.D. for \$19.95 on disk or data pack.

⇒ **ADAMLINK V** has been released by Herman Mason Jr. and Rich Drushel of HLM/GMK Hardware & Software Co. ADAMLINK V enhancements over III+ include: support for external modems up to 9600 baud, speeds up to 19,200 baud when transferring between two ADAMs, R.L.E. (Run-Length Encoded) picture files can be viewed onscreen from a Bulletin Board System, Keyboard Macros, ability to display catalog listings of disks or data packs, ability to use any ASCII character in a filename (up to 10 characters long), and correct operation of the capture text operation. All of these new capabilities and fixes along with the all of the capabilities of ADAMLINK III+ make ADAMLINK V the most advanced telecommunications program ever developed for the ADAM. Also, when you purchase ADAMLINK V, you get a coupon entitling you to one free upgrade (the two upgrades in the works are compatibility with the Micro Innovations M.I.B. 2 Serial Ports and the Trisyd Video Sydmodem 1200). ADAMLINK V is now available through N.I.A.D. for only \$24.95 on disk or data pack. Unfortunately, no upgrade is available for owners of previous versions of ADAMLINK due to the fact that Tom Clary has passed on the rights to HLM/GMK. A full review will be included in an upcoming issue, until then read the review by Bart "Zonker" Lynch in this issue for further details.

⇒ **ADAM GRAPHICS FOR IBM** has been released by Bob Sebelist of The Maine ADAM Library. This is a three disk collection of ADAM and IBM utilities that will allow ADAM owners to convert their ADAM graphics files with "RLE MAKER" into clean R.L.E. files without the usual garbage characters that make them hard to filter. Once the R.L.E. file is created, it can be transferred to an IBM format via The ADAM Connection, Modem, or converted to a CP/M or TDOS file and then transferred to IBM format through 22-Disk. Once ported over to the IBM disk, files can be converted with "ICONVERT" for a direct conversion or through "RLE VIEWER" for indirect conversion. ADAM GRAPHICS FOR IBM is now available through N.I.A.D. for only \$19.95 on disk. A full review will be included in an upcoming issue.

⇒ **ADAMCON 04** is fast approaching. If you have not sent in your reservation, DO SO IMMEDIATELY! By the time you receive this newsletter, the convention will be about a month away. We have heard

a lot of favorable reports so far as to attendance figures and also the fact that a lot of ADAMites attending this fourth convention in Cleveland, Ohio from July 23 to 26 are new or fairly new to the community. This along with the old stand-bys should make for a very interesting time for all to have. Also, we have heard whispers of some exciting new products that will be on display at the convention for the first time. For all the latest information and registration form re-read the past couple months' issues of the N.I.A.D. Newsletter or contact:

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BBS: The Trading Post - (216) 791-4022
VOICE: days-(216) 851-3347, eves-(216) 231-8813

⇒ **The N.I.A.D. PRODUCT LIST** has undergone some major changes due to our preparation to publish a new Product Catalog. A wide number of programs have been dropped altogether due to being outdated, the release of better programs that perform the same functions, etc. Below is a complete listing of all the programs that have been dropped as well as the program that we recommend in place of it.

PROGRAM DROPPED

REPLACEMENT PROGRAM(s)

2010: The Text Adventure	No longer available
AutoBackup	ADAM's Desk Top
Backup 3.0	File Manager V3.0
Backup+ 3.0	File Manager V3.0
CP/M 2.2 & Assembler	T-DOS V4.59
Flash Facts: Vocabulator	No longer available
Grandma's Recipes	No longer available
Happy Clips Vol. 1-5	IBM Clip-Art for the ADAM
Intel-Best 3.3	SmartBasic V1.x or SuperBasic+
Intel-Load V1.0	P.D. programs available
Intel-Load V2.0	P.D. programs available
KopyKat	File Manager V3.0
MegaDisk 1.0	ADAM's Desk Top
PrBoot	ADAM's Desk Top
RamBoot	ADAM's Desk Top
ShowOff Ila	SmartWriter Elite, S.W. Helper
SmartDSK I	ADAM's Desk Top
SmartDSK II	ADAM's Desk Top
SmartDSK III	ADAM's Desk Top, File Mgr. V3.0
SpeedyWrite V1.0	SpeedyWrite V2.0
SpriteMaster	SpritePower
SwiftBasic 80	SmartBasic V1.x
SwiftDisk	ADAM's Desk Top
SwiftLink 1.3	ADAMLink V
TurboDisk 1.0	ADAM's Desk Top
TurboDisk 2.0	ADAM's Desk Top
Visi-Sprite V6.5	SpritePower
XRAMpak 1.0	ADAM's Desk Top

Other product changes which have transpired include:

⇒ ADAMCalc Patch and ADAMLink II Patch have been combined into one package titled ADAMCalc & Link II Dot Matrix Patches.

⇒ B&R Handyman Vol. 1 and Vol. 2 have been combined into one package titled B&R Handyman Vol. I & II.

Watch for further product changes in the July / August issue and also a new series of articles titled "State of the Art ADAM 'Ware'".



KEEP YOUR ADAM RUNNING

Part VI: Databases on the ADAM

by John Burns

EDITOR'S NOTE: This is the first installment of the sixth and final part of this series by John Burns subtitled "Beginners Guide to Research and Selection". This series was originally published in the Metro Toronto ADAM Group, MTAG, Newsletter, and was made available to us by Richard Clee. This first installment of part six discusses the basics of what a database program can be used for and how to go about setting it up for your own needs as well as things to watch out for. Next month, we will conclude this article and series with the second installment that deals with ADAM only database programs. Although a number of the ADAM programs he covers are no longer available, we will try to fill in the holes for you with more up-to-date details.

THE HOUSE OF CARDS:

What's a database? You hear all kinds of talk about them and you know they refer to a lot of computer stored information, but what are they really?

A database is nothing more than an electronic stack of filing cards with standardized information titles on any subject entered on them. The database will not only deal the cards out in piles (search for a subject) but will extract, assemble and collate information lines from each card (report generation).

HANDLING RAW DATA:

You create a database by entering information into the computer in the same way that you would make up a Christmas shopping list and a birthday card list on all your friends. You could make two or three different lists covering, say, birthday cards, Christmas cards or Christmas gifts, but the way most of us do it, especially if we're doing it over a period of time, is to first try making listings on a page and when we discover that isn't flexible enough, we go to filing cards and make up one card on each friend. On that card you could insert their name, address, phone numbers, likes and dislikes, hobbies and birth date, when they last entertained you, whether they sent you a birthday present or whatever. When it came time to send the gifts or decide who got just a Christmas card, you would go through the FILE drawer and make selections from the RECORD cards, stacking the cards into BATCH piles, according to the information contained in the headings or FIELDS. The problem arises when you have somebody who should be selected for more than one card pile and you only have the one card. What do you do about the friend who has a birthday in December? His record card is already in the pile for those who get a Christmas gift. Oh, Oh. Now you have to start creating duplicate cards. That's the hard way. Enter the tool of the century, the computer database.

WHAT IT WILL NOT DO:

A database WILL NOT eliminate the drudgery of typing the RECORD cards or creating the information FIELD headings on your friends. It won't make the gathering of the information any easier or quicker. In some cases, entering that gathered information into the computer FIELDS takes even longer than just making up filing cards because you are locked into certain information formats. Because no computer is as flexible, as easily prompted or association-memory rigged as is the human brain, you have to be exact and painstaking in the creation of the headings, questions or information FIELDS on your RECORD cards. You have to remember to do things (the entries) the same way every time just like training an animal. If you don't do it the same way every time, the poor thing gets confused and can't give you the results you want.

DATES:

For example, you have to decide, once and for all, how you are going to enter something as simple as DATES. Suppose you want to enter the 19th DAY of the MONTH of March in the YEAR 1990. Your first reaction

is, 'That's simple.' Really? Consider again. Will it be entered as Mar19/90; 19Mar90; 19,03,90; 3/19/90; March 19-90 or March 19th, 1990 or full numeric such as 031990? The more recognized conventions are the American Date Presentation Format of MM/DD/YY, the British format of DD/MM/YY and the ANSI format of YY.MM.DD. There are also French, German and Italian formats. Database program manuals seem to suggest using the ANSI format because the date is arranged in proper sort order and makes for easier handling by the micro-processor. (I presume easier equals faster.) Regardless of which you use, the human brain would look at them and recognize all as variations of the same date, even if mixed up. ADAM can't handle that mix up and not many computers can. Most computer programs don't care how you enter information, as long as you do it the SAME WAY, EVERY TIME.

PICKY, PICKY:

It is this sort of petty pickiness that sometimes deters people from using or creating a database. They just can't be bothered. On the other hand, for those disciplined individuals who are willing to put up with the pickiness of computer entry input, there are great benefits. A database will intake all your information (known as RAM DATA) one time then select, manipulate and display it in many ways and many times. It could be by the FIELDS of alphabet, by location, postal code, telephone number, likes, dislikes, shoe size, the number of children or whether they sent you a gift last year. You can quickly decide who gets the gifts and who gets only the greeting. [SELECT THOSE WHO SENT ME A GIFT LAST YEAR]. You can print out lists, generate mailing labels or send a personalized form letter to some or all of them and do it FAST!

WHAT A DATABASE CAN DO:

For computer APPLICATION USERS who are not into programming, a database can be a real business or education tool. It can be trained (or the operator can be trained) to handle anything from a simple customer / prospect list to the operation of a completely cross-referenced encyclopedia with index. (Not recommended on ADAM!) It will handle character or text information, numbers and logic questions.

EXAMPLES:

It can handle business inventories or production solutions. [HOW MANY QUARTER INCH BOLTS IN BIN No. 4 AT LAST INVENTORY?], [HOW MANY QUARTER INCH BOLTS IN TOTAL INVENTORY NOW?] For that repeat order of Widgets, it can remember (and you can locate!) the final production settings that worked best on milling machine No. 3 to produce the last order.

It can generate selective customer mailing lists, [DISPLAY ACCOUNT NAMES / ADDRESSES WITH SALES GREATER THAN \$2,000 ANNUAL]. It will do mail merge for personalized form letters, provided you do the proper samples of FORMATS. Instead of 'Attention Occupant', it will insert 'Dear Larry' or 'Dear Mr. Johnson', when it types the letter. It will generate mailing labels by extracting a multi-line address (usually 5) or keep track of product development information. [DISPLAY COMPONENTS FOR X-15] or [DISPLAY \$ TOTAL FOR BILL OF MATERIAL ON X-15 SHOE SCRAPER]. It will keep corporate personnel records and give returns such as, [DISPLAY MACHINE OPERATORS IN DEPT. 101]. Some database programs will allow you to be sneaky and ask for something not really programmed in. More than that, they will understand a short form request. Say, that the normal retirement age for your machine operators is 65 but you don't really have a specific field for retirement dates. You could get the information in short form like this, [DISP MACH OPS AGE 65 BY 311289]. The computer, if it has the right program, will quite correctly interpret it to mean you want a list of those machine operators that will be 65 by year end and up for retirement.

LOGIC:

Some database programs will handle logic problems. LOGICAL is when the question can be answered with YES, NO or TRUE, FALSE. Questions like [IS THIS EMPLOYEE LEFT HANDED?] or [VALID DRIVERS LICENSE?]. This makes the database excellent for fast input and result gathering of multiple choice tests or examinations. You just input the Yes/No, True/False selections and the computer will give you a correct score count. (Plus do averages and bell curves if you feed it properly!)

SPREADSHEETS:

A database will do accounting and payroll and keep track of bills payable or accounts receivable, [DISPLAY ALL PAYABLE ACCOUNTS DUE NEXT WEEK]. If you are heavy into accounting, financial tracking or playing the 'What If' projection game, [WHAT HAPPENS TO OUR COMPANY IF SALES PROFITS GO UP 2% BUT THE UNION WANTS 9%?], then you should consider the SPREADSHEET. It is a database specifically geared to financial problems.

FIELD LAYOUT:

The secret to this ability to locate, select, display and print information is in the FIELDS you establish on the RECORD card entry of the database. It will handle information on practically anything you can type into HORIZONTAL ROW form or into VERTICAL HEADING templates. Horizontal is when the headings or FIELDS are laid across the top of a columned, accounting-type sheet. You tab across the ROW and fill in each box. Vertical headings are where the fields are repeated once for each card or RECORD on the screen and you go down the list typing in your responses.

ESTABLISHING DATABASE USE & FIELDS:

The difference between having a good, smoothly working database that gives you the returns you want or one that is difficult to read and inconvenient to access or use with the Print Formats is in the advance planning you do and the experimentation you try. DON'T JUST DEPEND ON THE DOCUMENTATION. When you are setting up your database you should define the planning of the whole task under considerations of HOUSEKEEPING, PROCESS and END OF JOB.

HOUSEKEEPING is things like the design of the Fields. Are they the proper title length, have they been defined as Character, Numeric, Logic or Text? Am I exceeding my Record limitation of characters? Housekeeping and the ease of operation is what will keep the database growing. Design a sample run of 20 records and try some manipulations and format merges. You'll soon find out if your housekeeping is a good design you can live with.

PROCESS is the actual mechanical and electronic activity of selecting fields or tying the database to your formats. You have to know the limitations of what you can ask your program to handle or you may get the dreaded crash curse. Overload. Insufficient memory. Cannot access this file. Cannot read this file. The way you design the initial process can make a lot of difference on speed and ease of operation. This is where experience counts because the documentation rarely tells you what will cause the software to bomb.

END OF JOB is the real heart and justification of a database operation. When all is said and done, what is it to do? Establish what you want and what you expect the database to do for you. It is a tool. You are buying it and building a database to do something. What are the THREE MAIN items, your version of E.O.J., that are the end result you want? (If you have 640K instead of only 64K, then your identification list could be much longer than just 3 or 4 items.) Identification of this is critical before you start buying programs, let alone start designing the Record Fields or Formats.

There is no point in getting a database so sophisticated that you can't understand it or if it uses more memory than your computer has available. If you just want a program that will alphabetize your address book, then don't pay for a full blown database. Unless the features are

of benefit to you, they are wasted money.

Let us assume you have established your E.O.J. and it justifies buying a database program. Regardless of what type of database you get, it will have limitations. Your mission is to use and get full advantage of what you pay for. You can only do that by research on brochures (watch out! They lie or, at minimum, exaggerate.) or you can check with fellow ADAM owners and finally you can beg, borrow or buy the program and try it. You need to learn things like Field Title and Input limitations, Record limitations, search and display characteristics and the merge capabilities. Most people get so concerned with the creation and input of the RAW database, they forget the importance of those outside formats (or Forms). A database without them is like a telephone book without a phone. Formats are the real user of your database. You've got all that information bottled up but the formats are the way you usefully apply that information for problem solving.

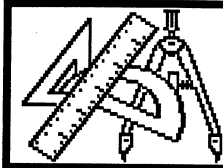
ADVANCE THINKING:

The problem most people have when they get a new database program is that they charge into their justifying project too soon. After doing input on hundreds of records, they discover they set up inadequate or inaccurate FIELDS or that they designated Primary Search Fields incorrectly or that the fields they established are just plain inconvenient for input. Some databases WILL NOT ALLOW FIELD CHANGES in mid process. You are either locked into the fields and formats you started with or you have to dump the whole operation and start over again. Now you know why I suggest the 20 record sample run to test HOUSEKEEPING. Nothing drives you crazier than the discovery, around record 500, that you blew it. You may want to display a NAME and PHONE number as primary fields, with the address and mail codes as secondaries. But most information sources will give it as NAME, ADDRESS, MAIL CODE and then PHONE. What you forgot is that you can usually call up just NAME and PHONE only, but it is a lot easier to input if it corresponds with your information source. Your layout might cause you a lot of back and forth time wasting that can be avoided by advance thinking or some short trial and error work. TAKE THE TIME TO LEARN IT FIRST!

HEAVY WEIGHT PROGRAMS:

In the course of my business experience I have worked with databases using the IBM format, the MacINTOSH format, COMMODORE and, our poor orphan, ADAM. On IBM I used a huge database on a System 36. The database was a custom design using RPG II language (Report Generator II). It was speedy and fully integrated but the most minute field change required an Act of Parliament and a week of high priced programmer time. I used an IBM XT clone with dBASE III+ running a custom personnel tracking package. It was a cracker. Fast, comprehensive and the total integration produced mailing labels, generated personalized form letters, tracked personnel by skills, tracked client companies with their own internal changes and maintained an auto-dial library of phone numbers for people who could provide information on any given subject. It would do everything except slice bread. But, it wasn't cheap! Just the programming cost \$5,000 and required 640K, a 40 Meg Hard Drive and about 3 months to structure. On Mac (slow, but I love it!), I've used MicroSoft Filer and the database on Jazz. I found MicroSoft Filer, even on the people oriented Mac, to be difficult. It is advertised as capable of producing customized forms, even including pictures, plus sorting of every field. That's true. It will give an infinite variety of information manipulation but it has a complicated entry system and slow operation. The documentation is BAD! The database on Jazz, an integrated program for Mac that also includes a word processor, spreadsheet, communications and graphics (Lotus 1,2,3 for Mac), was less complicated but limited in size and information management. But Jazz worked well because it had much better documentation. The instructions actually seemed to have been written by a user, not some genius programmer.

All of those programs are definitely out of the ADAM league but I knew I had to have a database for home use. The process of finding a good database that would work on ADAM is where this article started and will conclude.



A SILLY MILLIMETER LONGER

Notes on 24-Pin Printers and the ADAM

by Patricia Herrington

EDITOR'S NOTE: The following article by Pat Herrington first appeared in the February, 1992 issue of the MOAUG / 463 newsletter under the title "A Silly Millimeter Longer" (subtitled "Notes on 24-pin Printers.") The article discusses the Panasonic KX-P1124 and the unique aspects of such printers, problems encountered, partial solutions, new hardware and software designed to access 24-pins.

It's been a little over a year since I bought my 24-pin printer. I had been eyeing them for a long time, but it wasn't until then that the price came down enough to be within my reach. Meanwhile, I had been doing a lot of research on a number of brands of printers. I collected magazine reviews and talked to people who owned different models. I knew of nobody locally who owned a 24-pin printer, but I knew that Terry Fowler sold them, so I called to make sure the printer would work with my setup. He assured me that it would, although it would use no more pins in printing graphics than my old 9 pin. But I could use all the built-in fonts and other features, and get superior 24-pin quality when printing text.

Well, I write a lot of text, and that's what I really wanted the printer for. I was perfectly happy with the way my old 9-pin printed out graphics, and if the 24-pin would do as well, then I'd have the best of both worlds. So I bought a Panasonic KX-P1124. And, sure enough, it does as well on graphics printout. But it doesn't do the SAME! None of my research prepared me for the fact that the printout with this printer is a little bit TALLER. For me, that turned out to be frustrating.

I don't think most people would mind the taller printout. In fact, it has a distinct advantage: it makes it easier to design a full page in PowerPAINT, for example. A full PowerPAINT workspace takes up only about 7/8 of a page in length, and if you want a full page, you can add another half-cell or so in length at the bottom of the page. But the same workspace, printed with a 24-pin printer, is almost exactly the size of the page. (I even read an article by Terry Fowler citing this phenomenon to show that PowerPAINT had obviously been designed for use with a 24-pin printer, but that happens not to be the case.)

Again, that should work just fine for most people. I like it most of the time, myself. But I do a lot of graphics design for other people, almost all of whom use 9-pin printers. When I print hard copy for illustration purposes, I would rather that it was an exact replica of what my customers will get when they print the graphics themselves.

That's not the biggie, though. Where the extra height really become a problem is when it's time to print graphic labels. In fact, if you design a label (of any conventional size) with a border, it just flat won't fit on standard pinfeed labels.

If your label design does not use a border, and if it does not contain graphics in every single row of pixels (both top and bottom) you can print the labels one at a time, so long as you realign the labels manually after printing each one. But even if your label uses all the rows, there are other things you can try.

One way to make label printing possible is to make changes to the software. Both PowerPAINT and Swift's Label Printshop contain a "System Configuration Menu", one of the options being to change Graphics Print Codes. Only ONE of these codes applies here, and that is Line Space. The default code is 27, 51,23. Only the third byte needs to be changed, but you will be asked to enter all three bytes. For the first byte, you enter 27; for the second, 51. Now, for the third byte, enter a number slightly lower than 23. You can try 22, 21, or 20 and see how that affects your label. (If you enter 19 or less, you may begin to lose a pixel.) It is probably best NOT to make your choices permanent on the medium, because you will probably continue to use the defaults most

of the time.

Changing the line spacing does cause a bit of distortion, but it's minor, and you will be able to fit the results on standard pinfeed labels with one of these choices. However, there is still the problem of the space BETWEEN labels, so chances are that you will need to align each label manually, rather than leaving the program to do it for you.

Another solution would be to find labels that are just a fraction of an inch taller. If you do, I hope you will tell me where you got them, because I have been unable to find pinfeed labels in anything other than standard sizes.

There is another way around the problem, for those who have access to a copier. You can buy copy machine labels in various sizes. Then you can print your labels on regular paper and run off as many sheets of labels as you like. Copier labels are readily available from office supply stores or by mail. Most are white, but you can also find pastels, and there are even some full-page labels which can be cut to ANY size. Avery is one manufacturer, and there are others.

Certainly the easiest solution of all is to keep an old 9 pin printer handy just for printing out labels. You can usually pick one up for next to nothing these days.

HOWEVER... all these gyrations may soon prove unnecessary. Several programmers have been working on software designed specifically for 24-pin printers, and the progress to date is very encouraging. Jim Walters, for example, has already updated several of his programs for use with 24-pins. In some cases the upgrade is FREE, merely for the cost of postage. Print Works, for example, now includes an option which allows you to choose which printer you want to use. I haven't seen this yet, but I'm rather excited about it, and looking forward to seeing Jim's NEW software, too... particularly some that is still in the development stage.

The biggest drawback to the 24-pin is that it does not work properly with some third-party interfaces. I'm glad I didn't know that before I bought mine, or I'd have been afraid to buy it (and I'm VERY glad I did!) I plugged it into my Orphanware interface, and immediately it purred like a kitten. But later there were reports of people who had trouble with the E&T interfaces, and now it appears that there have been problems with some of the others as well. The solution was to get a buffer, which is a good idea anyway because you can ALWAYS use a print buffer.

But Terry Fowler enlisted the aid of Mark Gordon (of Micro Innovations) who almost immediately developed a brand-new interface which, according to all reports, works beautifully and is already for sale through ADAM's House. (These ADAM folk don't let grass grow under THEIR feet, do they?)

And I'm really glad, because I expect to see a lot of people getting 24-pin printers in the near future, as the prices plummet. Mine cost me less than I paid for my first 9 pin, and there is an even less expensive model on the market. As newer models come out, older ones continue to become more and more affordable. They are "old" only in the sense that they aren't THIS year's model, and who cares? They are still packed with features and are very reliable.

I am speaking specifically of Panasonic brands. I haven't seen any others. But Panasonic's have always been a favorite of ADAM users because they are well-designed, dependable, and easy to work with. They have superior paper-handling capabilities and a variety of fonts. Both the KX-P1124 and the less expensive KX-P1123 have a touch control panel on the front, which allows you to take advantage of most

functions WITHOUT embedded commands in the software. My printer even lets me define three macros ...that is, I can select a font style, a pitch size (width), and a Lines Per Inch setting, as well as form length... then I can enter it all at once, so whenever I want to use that particular combination, all I have to do is select that macro.

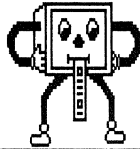
Of course, there will be times you will PREFER to use embedded commands. For example, when you want to change font styles within a document. There are several good word processing programs out there, in both CP/M (TDOS) and E.O.S. I have always used SmartWriter most of the time (just because I KNOW everybody has SmartWriter) so I can't tell you details on the others, except to say that most of them do provide for embedded commands. To access my printer with SmartWriter I usually just use a Public Domain printer patch called D.M.P. DOS (again, because it's available to everyone, and if you don't have it, I will gladly give you a copy). This patch is pretty much the same as the DOS disk that comes with a disk drive, but it initializes the printer when it boots.

D.M.P. DOS works pretty well, and it does allow for embedded commands, but it does not have commands to access all the features of my printer... such as double high printing, script fonts, and such. So I was delighted when Hexace Software came out with SmartWriter Helper. Not only does it allow you to access a RAM drive and a second disk drive, but Hexace will customize the commands to suit your particular printer. I now can access all the KX-P1124's special features from within a document as well as from the front panel (and there are some features that I can now use that were NOT available to me from the controls.) This is a very inexpensive program, too (\$10)!

Just recently I received word that Walters Software Co. has released an enhanced SmartWriter volume, too. It's called SmartWriter Elite, and it even fixes that infamous line-and-a-half space bug that has driven everybody nuts for lo, these many years. It also allows the use of both 9-pin and 24-pin printers. I'm not sure, but I think it also allows the use of the ADAM Printer, though it's main function in that case would seem to be fixing the space bug. It's also available on cartridge. I haven't yet seen this one, but it's on my list of programs I want to buy. It's somewhat more expensive, though, especially on cartridge. (Disk or data pack \$19.95, cartridge \$39.95) SmartWriter Elite, too, allows use of the second disk drive and a RAM drive.

I kind of hate to write about these new packages in the middle of an article about the KX-P1124, because they are useful programs for owners of 9-pin printers, too. But it's especially nice to know that if you are considering the purchase of the 24-pin, there is already software that takes advantage of it's features, and more on the way.

It's hard to decide which model to buy when you are considering a dot matrix printer, but consider this: A good printer is a long-term investment. It will be with you for years, and it can be used with other computers, too. If you really don't want a lot of fancy features, that's fine, too; but if you think you might want them in a year or two, you'd do better to get them in the first place than to buy another printer later.



ADAM WISH LIST

Let's Keep ADAM Growing
by Guy Cousineau

For over six months now, the ADAM wish list project has been gathering steam. I have received several requests and believe it or not, most of them have been answered. The impossible has been done, immediately. Miracles take a bit longer.

Let's keep this project going for the good of ADAM. Think of what you use your ADAM for and what you want to use it for. Think also of what frustrates you when you use your computer. Formulate an idea along these lines:

- I use my ADAM to...
- I use the following software / hardware...
- It does this well...
- It does not handle...

Once you get something under the last heading, you have a wish list item. Describe your WISH as clearly as possible and forward it to me either through your local user's group or directly. Your wish will be put on the list, analysed, and acted upon as quickly as possible. If the request is beyond my realm of expertise, I will refer it to someone who is willing and able to tackle it. It may also turn out that you will be pointed to existing sources that can solve your problem.

Request can involve hardware or software. They can relate to incompatibility between some software and hardware combinations or between 'files' created by different software. We should be able to transport information from one environment to another with minimum difficulty.

Let's keep ADAM growing.

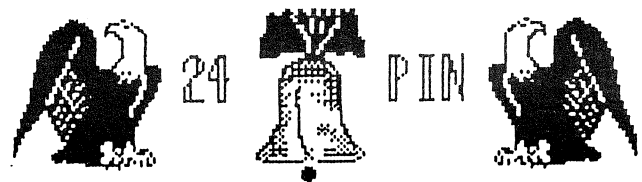
Guy Cousineau
Special Projects and Wish List Coordinator
1059 Hindley Street
Ottawa, Ontario, Canada K2B 5L9

EDITOR'S NOTE: You may also send your ADAM wishes directly to N.I.A.D. and we will pass them along to Guy. Better yet, the next time you phone-in an order or call to chat, let us know what you are looking for as far as new ADAM software, hardware, supplies or manuals. This will greatly enhance the speed with which we can get the information passed on to Guy and the rest of the ADAM programmers and hardware developers.

NINE PIN PRINTER



TWENTY*FOUR PIN PRINTER





FASTER SmartWRITER

Part III: Other ADAM Word Processors

by David Sands

EDITOR'S NOTE: This article was supplied to us by The ADAM News Network and originally appeared in the Vancouver Island Senior ADAMphiles A.U.G. Newsletter.

SmartWRITER, dear to the hearts of so many ADAM owners, isn't the only word processing program for our favorite computer, and it may not be the best, either.

There is a selection worth considering if you need something the built-in doesn't offer. SmartWRITER (SW) is built-in because it lives on a Read Only Memory (ROM) chip on ADAM's main board, and is therefore ON with the power and "ESCAPE / WP" keystroke we're all so familiar with. SW's instant availability comes from it's being "hardware" as much as software, and of course that is also it's biggest drawback. All of it's faults, as well as virtues, are cast in silicon.

And if SmartWRITER's faults have gone beyond being charming little idiosyncrasies and have started to prey on your mind, perhaps we should explore the available alternatives.

As far as I know, all of them are available from the usual ADAM mail order suppliers. And while we're on the subject, most are not Public Domain, which means if you obtain them without paying for them, you're probably not going to go to heaven, at the very least.

Besides, if there's anything you need the original documentation for, it's a word processing program, and the guy who will give you a program on your data pack or disk will want real money for photocopies of the manual, so you might as well get your own genuine one. It's always nice when morality and realism lead to the same conclusion. Rare, too.

SmartLETTERS & FORMS was one of Coleco's original ADAM programs and deserves a mention only as a variation on word processing. It uses SmartWRITER and is basically a fill-in-the-blanks set of pre-written forms. If you can't think what to say when someone offers you a job, the letter is there. It's the kind of the-computer-can-wipe-your-nose-for-you thing we don't see much of anymore, thankfully.

ADAM can use the CP/M and T-DOS operating systems, which means that many CP/M word processing programs, such as the original **WordStar**, will run on ADAM. Two current, very popular programs, **VDE266** and **Express Word**, are good examples of WordStar-type word processors. The original WordStar was written for 64K computers, in the days when 64K was the best you could hope for in a personal computer. Those days, and the first WordStar, are gone, but disks containing the program can still be found.

Learning WordStar and adapting it to the ADAM will take a major portion of the time you have left on Earth. The newer programs may be a better bet.

VDE266 and WordStar use a system of "Control-codes", which must be learned. For example, hold the Control key and type 'E' to move the cursor on the screen. If you've been spoiled by SmartWRITER, learning the dozens of control codes for any new program is something to consider. Basically, it's a matter of practice and memorization.

Express Word is a new (to me, at least) word processor for the ADAM, and since I plan to use every program before writing anything definitive, I can only report that it's available, for \$34.95, from it's distributor (TCI) and will require CP/M or T-DOS. VDE266 is Public Domain. TCI's address is:

17733 205 Ave. NE.
Woodwinville, WA 98072

SpeedyWRITE V2.0 is another control-code word processor, but doesn't require CP/M or T-DOS. It uses the ADAM's E.O.S. system, which means you just have to learn the program, not a new operating system as well. Pull the computer reset after inserting the disk or data pack and it boots up. Speedy (for short) has excellent documentation, (set in small type), considerable flexibility, all the features every word processor should have, and a growing reputation.

A short list of SpeedyWRITE's features, in addition to those in SmartWRITER, includes: finding the length of the document (file), split screen viewing of two parts of a file at once, macros which are long commands or inserts done with a single keystroke, search and replace with wildcards (partial cues to the word sought), search forward and back in a file, considerable printing flexibility including printing specified pages only, considerable formatting flexibility including two columns, justified printing and special fonts, footnotes, and mail-merge printing. Everything you always wanted...

SpeedyWRITE V2.0 is probably (no real information exists) the second most popular word processor for the ADAM.

An early SmartWRITER alternative was **MultiWRITE**, which runs under SmartBASIC V1.0 and must have it loaded first. MultiWRITE was sold only on data pack, and suffers for it, primarily in that it is very slow to load, run and to change modes, i.e. to Print from Edit. However, it could be copied to disk to speed up loading times.

MultiWRITE's prime feature is it's screen displays: you get 64 letters and spaces on a line on screen at all times without scrolling across. This is created at the expense of character size, but with a good television or monitor, is quite usable. It's also "control code" driven, although there are only 11 codes to learn and it also uses the ADAM's command keys.

Similar to MultiWRITE, and also a Strategic Software product, is **NewsMAKER**. It does not offer 64 columns, but will print justified type (both sides of the column are lined up straight) and uses a "desktop publishing" motif which will allow columns of different widths on a page, for example to inset quotations.

The only "integrated" program package for the ADAM is **MicroWORKS**, also from Strategic Software. Any integrated program attempts to offer an all-in-one program that will do everything. In MicroWORKS' case, that means a Text Editor, Spreadsheet, Database, Business Graphics and Picture Editor. The integrated aspect also arises from the ability to incorporate files created by one program into another. Using Business Graphics made from Spreadsheet numbers in a Text Editor printout illustrated with Pictures; is an everyday example.

All three of the word processors mentioned; MultiWRITE, NewsMAKER and MicroWORKS, work in slightly different ways from each other. The Text Editor in MicroWORKS offers the fewest features, but does offer text centering, not found in the other two.

There are several "enhancement" programs around, all of which basically modify the printout of the word processor, but aren't word processors themselves. **File Printer** by ADAM's HOUSE, **ShowOFF II: Writermate** by Digital Express, **PowerPRINT** by Strategic Software and **SmartWRITER's HELPER** by Hexace Software are four of them.

Future installments of this series (entitled "Beyond SmartWRITER") will be devoted to what it's like working with these various SmartWRITER alternatives, a discussion of the differences between word processing on the ADAM and with one of the big two MS-DOS programs, and some less likely topics.



EXPLORING SmartBASIC

Part IX: Low Resolution Graphics

by Guy Cousineau

EDITOR'S NOTE: The following is the ninth in a series of articles on SmartBASIC written by Guy Cousineau of the ADAM User-Friendly Group. The article was made available to us by Ron Mitchell, President.

LOW RES GRAPHICS

The **GR** command places you in low resolution graphics mode. This mode is similar to the graphics mode in APPLE BASIC and you can copy some of those programs directly with only minor changes. In the GR mode, the screen is partitioned into a 40 by 40 grid. Each grid can be any color which gives you reasonable block graphics capabilities.

The **COLOR** command allows you to set the color for the plot command. This is similar to choosing a pen color before drawing something. The default color is 0 and is always selected when you enter GR mode. Color values may be set from 0 to 15 which should allow for 16 colors, but it doesn't. In Coleco's efforts to make SmartBASIC as much APPLE compatible, they decided to add a translation table which converts the Coleco colors to APPLE colors. I have forgotten which colors cannot be accessed, but it is not important. You can defeat the color translation with the following POKES:

```
POKE 18735,121: POKE 18736,0: POKE 18737,0: REM COLOR
POKE 19256,0: POKE 19257,0: POKE 19258,0: REM SCRIN
```

Now you can use the standard colors where 0 is transparent, 1 is black, and so on.

The **PLOT** command will paint a block of the chosen **COLOR** at the **x, y** coordinates supplied. Say you want to show a single die with the number four. We need to plot four blocks in a square pattern:

```
100 GR
110 COLOR=7: REM choose a color
120 PLOT 10,10
130 PLOT 10,12
140 PLOT 12,10
150 PLOT 12,12
```

Now we have the four dots, but what about drawing a box around them. I will almost certainly mess it up if I try to plot a whole bunch of points. That's where **HLIN** and **VLIN** come in handy. Both commands have a similar syntax and draw horizontal or vertical lines:

HLIN from, to AT line

Note that 'from', 'to' and 'line' can be integer values or variables. Back to the die program. Let's change the color of the die outline and continue with:

```
160 COLOR=13: REM change color for the border
170 HLIN 8,14 AT 8: REM a line 2 wider - 2 above the die
180 HLIN 8,14 AT 14: REM same thing below the die
190 VLIN 8,14 AT 8: REM left side
200 VLIN 8,14 AT 14: REM right side
```

The **SCRIN** command reads the color of the selected grid position. This can be handy in a game situation where you want to know where **OBSTACLES**, **WALLS**, **TREASURES**, **BAD GUYS**, etc. are. Why bother keeping a separate matrix with all the positions of the players? Use the **SCRIN** function:

```
a=SCRIN(5,5)
```

This command assigns the **COLOR** value of grid position 5,5 to the variable 'a'. This variable can now be checked against the known colors of walls, obstacles, other players, etc. Let's take a simple game in which we will use the joystick manipulation program illustrated in the previous article (Part 8, April '92 #87 Issue). We will start the program by drawing 10 obstacles at random on the screen. The player will start in the upper left corner and will be allowed to move freely around the screen. If he should try to move on to an obstacle block, the program will abort. Nothing fancy, but it illustrates the basic technique.

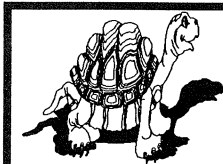
```
10 REM PDL and GR demo
20 GR
30 COLOR=12
40 x=0:y=0: REM set the start position
50 FOR z=1 TO 10
60 PLOT INT(RND(1)*30+5), INT(RND(1)*30+5): REM random block
70 NEXT z
80 COLOR=7: REM set player color
90 PLOT x,y: REM show where he is
100 x1=x: y1=y: REM remember where player was
110 p=PDL(5): REM read the joystick
120 y=y+(p=4 or p=6 or p=12)*(y<39)
130 y=y-(p=1 or p=3 or p=9)*(y>0)
140 x=x+(p=2 or p=3 or p=6)*(x<39)
150 x=x-(p>7)*(x>0)
160 IF SCRIN(x,y)=12 GOTO 300: REM we hit one
170 COLOR=0: REM set color to OFF
180 PLOT x1,y1: REM erase player at old position
200 GOTO 80: REM show new position and continue
299 REM hit an obstacle
300 PRINT chr$(7): REM wake player up
310 PRINT "YOU LOSE": END
```

As you can see, this is not a fancy program. There is no scoring and no timer. As a matter of fact, the only way to end the program is by running into an obstacle or pressing **CONTROL-C**. Note that the player is erased just before being redrawn. This will create a short flash so you can see where you are. If the player had been erased at line 95 when we still knew where he was, he would have been **OFF** longer than **ON** and would have been difficult to see. This is an important point to consider in game animation: Make sure the bulk of the computer time is used up while the player is **ON**.

I have seen a few programs that save the contents of a GR screen. This seems like a waste since it can be accomplished with the following.

```
10 DIM m(39,39)
.....
799 REM save game and exit
800 FOR x=0 TO 39
810 FOR y=0 TO 39
820 m(x,y) = SCRIN(x,y)
830 NEXT y
840 NEXT x
850 REM save the x,y matrix to file or printer
.....
899 REM reload the game
900 REM read the data from file
.....
950 FOR x=0 TO 39
960 FOR y=0 TO 39
970 COLOR = m(x,y)
980 PLOT x,y
990 NEXT y,x: REM remember this one?
```

(CONTINUED ON PAGE 12, COLUMN 1)



THE LOGO NOTEBOOK

Part VI: Conditional Statements

by Ron H. Mitchell

EDITOR'S NOTE: This is the sixth in a series of articles by Ron Mitchell, Editor of The ADAM User-Friendly Group newsletter, covering SmartLOGO and the many aspects of programming in SmartLOGO.

CONDITIONALS

The proper use of conditional statements is an essential part of all but the most simple of programs. Without conditionals, ADAM will quite simply process your program from its beginning, instruction by instruction, to its end with no attention paid to the poor user sitting there watching. User can press all the keys he or she wants. ADAM will pay not the slightest mind to any of them except, of course, for the escape key, which in LOGO brings things to a grinding halt. Sort of like using a brick wall to stop a Volkswagen. Your ability to proceed further is somewhat diminished.

You may indeed want your program to do different things depending on the results of certain calculations or on which key a user presses. This will require that the normal 'beginning to end' sequence of following instructions usually followed by LOGO be somehow altered. In fact this applies not only to LOGO but also to any program you write, be it in BASIC, assembler or whatever language.

In LOGO there is one very important primitive that will accomplish the task. It is one of the primitives that can be used both as a command or an operation, depending upon its context:

IF

Now in SmartBASIC, you could write the following short program.

```
10 HOME
20 INPUT "Monthly Income? "; a
30 PRINT: INPUT "Monthly Expenses? "; b
40 PRINT: PRINT
50 R = A - B
60 IF R > 0 THEN PRINT "I'm rich!": GOTO 80
70 PRINT "I'm broke!"
80 END
```

Obviously line 70 will only be executed if the value of the variable r is zero or less. Otherwise the program will jump from line 60 to line 80.

<IF> performs the same function in SmartLOGO, but the syntax is a little different. The program would look like this:

```
TO RICH.OR.BROKE
CS
TYPE [MONTHLY INCOME? ]
MAKE "A GETNUM.A
PR [ ]
TYPE [MONTHLY EXPENSES? ]
MAKE "B GETNUM.B
PR [ ]
MAKE "R :A - :B
IF :R > 0 [PR [I'M RICH!!] ] [PR [I'M BROKE!!] ]
END
```

```
TO GETNUM.A
MAKE "A FIRST RL
OP :A
END
```

```
TO GETNUM.B
```

```
MAKE "B FIRST RL
OP :B
END
```

The two sub-procedures look after getting input from the user. They could probably be combined into one, but for purposes of clarity, we'll leave them separate for the moment.

Note the syntax of <IF> in the main procedure:

RICH.OR.BROKE

The general form is:

IF predicate instructionlist instructionlist

A predicate is a LOGO operation that outputs only one of two things:

TRUE or FALSE

In our program, we are using the infix operation ">" as a predicate, so the condition to be evaluated is:

:R > 0

If the condition is true then the first instructionlist following will be executed. If not, the second instructionlist will be carried out. Both instructionlists are enclosed in square brackets, "[]".

OTHER LOGO COMMANDS

We've also used a couple of other LOGO commands that have not appeared before. We'll deal with these in more detail next article, but quickly:

TYPE is a LOGO command that does the same as PR, except that the cursor is left at the end of the line rather than being moved to a new line. It's like the semi-colon in SmartBASIC

RL is short for READLIST. On seeing this command, LOGO will wait for input from the user. You can type a complete sentence, a series of words, or a number, and READLIST will assign it to the variable you choose, in our case :A and :B.

FIRST will select the first element of the list obtained by READLIST. In this case we're using it to convert the user's input to a numerical value.

More about that next time!

ABOUT THE A.U.F.G.

The ADAM User-Friendly Group exists to provide ADAM owners in the National Capital area and elsewhere with a source of information on the Coleco ADAM home computer. Their purpose is to obtain and share information on programming principles and skills, software and hardware products, and public domain programs. Membership fee is \$25.00 annually.

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USING TDOS - ADVANCED

Part IV: Archiving, Command History and SmartKEYS

by Guy Cousineau

EDITOR'S NOTE: This is the fourth in a series of articles on TDOS which were made available to us by Guy Cousineau at ADAMCON 03.

ARCHIVING

The ARCHIVE bit in CP/M is located in the last character of the file type. The DIR command will display these in lowercase if the last character is an alphabetic character. The TDIR program will display these in inverse video regardless of the character (even a blank). TDOS automatically resets the archive bit whenever a file is written to. You can use TDIR with the '/A' option to display files which have not been archived since their last update.

CRUNCH.COM and MAINT.COM (the latter by yours truly) can make use of the archive bit to crunch only the files which have not been archived. After the compression is completed, the archive bit is set in the source file.

You should periodically use the '/A' option in TDIR to remind you when you are overdue for backups. I use a submit file called NOTBU.SUB:

```
TDIR %1 /$A
```

It scans all user areas for non-archived files. The %1 parameter allows me to specify a drive and/or file name. Note that if no parameter is supplied, TDIR will display all files.

Not ALL applications programs reset the archive bit after working with a file. In particular, programs that write to an existing file must on their own initiative reset the archive bit. When using these types of programs, make a few tests to determine their compatibility with archiving schemes.

How often should you do backups? That depends on the uses you make of your system, the value of the information, and the consequences arising from the loss of a file.

If you play games which maintain a status or high score file, the consequences are relatively small and those files do not require frequent backups.

If you work with databases, you might prefer to make a backup after each major editing session. This is particularly true if you have thrown out the source documents used to compile the data.

Making backups could be as simple as making a duplicate copy of each disk in your system. This procedure, besides being tedious and expensive, does not take full advantage of all the TDOS features. If only one file has changed since the last backup, why should I copy all the files? Furthermore, why should my backup copy occupy the same amount of disk space as the original?

This is why we recommend a combination of the archive bit and file compression for backups. You could archive your files into a library to achieve even higher compression but the difficulties in adding files to an existing library do not make libraries effective for active programs. There are various ways of accomplishing backups. We will illustrate several methods which are based on system architecture. While there may be other ways to accomplish the same task, we consider our methods to be the most effective.

ONE DISK DRIVE

Use a single drive copy program to copy the selected files to another disk.

ONE SINGLE-SIDED AND ONE DOUBLE-SIDED DRIVE

Crunch files with the archive option from the double-sided to the single-sided drive. Since compression ratios average 40 to 60%, you should be able to backup even a full double-sided disk on to a single-sided one.

TWO DOUBLE-SIDED DRIVES

Crunch files with the archive option from one double-sided drive to user 0 of the other. Repeat the procedure for another source disk but this time send the files to user 1. If you find there is still sufficient space on the backup disk, you may wish to backup a third source disk to user 2. Be sure to indicate where each backup resides on the label of the disk.

ONE DISK DRIVE AND MEMORY EXPANDER

Start by crunching selected files to the memory expander. Particularly if you have a small expander, this approach will maximize the number of files you can backup in one pass. Insert your backup disk and copy the crunched files to it. Delete the files in the memory expander and repeat the procedure as often as necessary. While this procedure is not 100% secure, it offers greater flexibility to users with only one drive. Consider the following procedure using MAINT.COM; keypresses are in **bold**:

1. Boot MAINT
2. Insert disk to backup (say drive B)
3. Log B <CR>
4. Wild tag *.* /Archive mode
5. Group Krunch A <CR> (expansion RAM) Yes (use archive mode)
6. Log A <CR>
7. ^W (since files are new this acts as tag all)
8. Insert backup disk in drive B
9. Group Copy B <CR>
10. ^W (retag again)
11. Group Erase Yes (confirm delete)
12. repeat steps 2 to 11

You can use this technique in a fashion similar to the two double-sided drive option to backup more than one source disk on to the same backup disk.

HARD DRIVE

When I set up my hard drive, I attempted to limit each user area to about 500K of files. With this approach, one double-sided disk is sufficient to backup most user areas. Whenever one disk is not sufficient, I analyze it's contents to determine if any files can be moved to another user area or deleted altogether. This approach simplifies backups and ensures manageable directory listings in each user area. In the event that it is unpractical to split files in a large user area, some care must be exercised when backing up. I mark my two backup disks something like:

BACKUP D5 A-R BACKUP D5 S-Z

When i run MAINT on D5, I start with a Wild Tag *.* /A. I then untag all the files starting with S and higher. After backing up the first segment, I insert the second backup disk and press ^W to tag the remaining unarchived files.

COMMAND HISTORY

The command recall and line editing features of TDOS make the re-entering or correction of commands very user friendly. While these features may be used within programs, certain precautions must be taken.

(CONTINUED ON PAGE 12, COLUMN 2)

EXPLORING SmartBASIC, CONTINUED FROM PAGE 9

TECHNICAL NOTES

The screen in GR mode is 256 by 160 pixels. Each of the GR blocks is 6 wide by 4 high which gives 240 by 160. So if you were to paint the whole screen by a series of HLIN or VLIN commands, there would be a BAR on the right side which could not be painted. That is a minor problem as the bar can be considered part of the border; see below for changing the border color.

The more important point to consider is that the blocks are not square. In order to plot a square block, you need 2 wide ($2*6=12$) by 3 high ($3*4=12$). Using this technique, you can still create a 13x13 matrix of square blocks which is reasonable for several GAME type applications.

Remember the color-bleeding problem? The color can only be specified for each section of 8 horizontal pixels. So why do a series of 6-pixel blocks not bleed when painted different colors? This is due to a complicated algorithm that is used to paint part of the block on the foreground and part of the block on the background plane. I have not bothered entering into a detailed analysis of these plotting functions; interested hackers may analyze the PLOT routine to discover how it is done.

ROUTINE ADDRESSES

The GR command executes at 18492(483C). It sets the GR MODE flag, turns INVERSE off and resets the cursor and space values to high-bit characters. It then sets up the GR blocks with a series of character patterns of 6 bytes on and 2 bytes off. The GR text window is set to 4 lines at the bottom of the screen. Following are the POKE values required to change the window size:

NUMBER OF LINES	18536(4868)	18539(486B)
4	3	20
5	4	19
6	5	18
7	6	17
8	7	16

The default screen color on initialization is set according to the value at address 18633(48C9) which corresponds to $16*\text{color}$ value. The character color is set according to the byte at 18711(4917) which corresponds to $16*\text{set color} + \text{clear color}$, similar to text color.

The COLOR command is parsed at 15926(3E36) and 14875(3A1B). The two routines look for the symbol "=" and a numerical value respectively. Since COLOR can be specified as a variable, it is not checked for valid input. The routine executes at 11099(2B5B); if the value is 15 or less, the routine continues on to address 18735 where the color is translated and placed in memory. To disable the COLOR value check, POKE 11107,255. Try plotting blocks with colors above 15 for strange results.

PLOT is parsed in several sections where the line is checked for a number, then checked for a comma, then checked for a number. The CHECK FOR NUMBER parser is at 14875(3A1B). It executes at 11139(2B83) where it first checks that both coordinates are in the range of 0-39. It then jumps to 19102(4A9E) where the type of block to plot is calculated.

HLIN is parsed in 5 segments: number 14875(3A1B), comma 15939(3E43), number, 'AT' 15977(3E69), and number. The routine executes at 11170(2BA2) where it checks that the FROM TO AT values are in the proper range. The rest of the routine is located at 18805(4975); it sets up a loop to call the PLOT routine for each element of the line.

VLIN is parsed in an identical fashion to HLIN. It's execution is at

11219(2BD3) and 18940(49FC).

SCRN is a variable command and the parsing routine resides in an ambiguous part of memory like PEEK, TAB, SIN, etc. It's execution however, is in a fixed position at 11268(2C04). Since this is a MATH function, it gets the first coordinate from the Floating Point Accumulator, checks it for overflow and then gets the second coordinate from the token line. It then calls the translation routine at 19195(4AFB) and returns the COLOR value to the program via the Floating Point Accumulator.

Next time out, high resolution graphics.



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USING TDOS - ADVANCED, CONTINUED FROM PAGE 11

Input commands that wish to use the command history or editing must use BDOS function 10. Conversely, input commands which want to disable command history should use BDOS function 1. When using command recall within a program, the length of an input is determined by the first byte in the command buffer of the program. If the recalled command is longer than the buffer, it will terminate input without the opportunity to edit. When TPA space is not critical, set your input buffer size to it's maximum of 255 to avoid this problem.

SmartKEYS

The editing of SmartKEY display strings and return strings can be tedious at best. You must re-install TDOS and edit all 6 strings every time. If you have experience using a disk editor, there is an easier way: Start by making a copy of the 80 or 40 column version you use --> copy 80tdos45.com mytdos.com

Use a disk editor to edit MYTDOS.COM. Advance through the file until you reach the SmartKEY return strings. These will be easy to spot since each is 16 bytes long. We cannot provide an exact location as the TDOS BIOS varies greatly in size according to the configuration. If your disk editor has an ASCII search feature, look for DIR, TYPE, or another word that you know is in the SmartKEY menu.

Once you have found the start of the return strings, back up 60 bytes to locate the display strings. These are 6 elements of 10 bytes (including space for blanks); insert your new display strings while keeping track of the spacing. The return strings follow immediately after the display strings. Each is a maximum of 15 bytes long since a null (00) is required to terminate the string. If your new string is shorter than the old one, just terminate with a null. While it is not necessary to blank the unused portion of a return string, doing so will clean up the display and make them easier to locate the next time around. Remember that you can use control characters in your strings like <CR> to execute the command immediately as the key is pressed.

Save your editing changes and run MYTDOS to install the changed SmartKEY strings. When asked for SmartKEY changes, just answer NO and the default you have entered will be installed. If there is a glitch in the display or return strings, just take note and re-edit MYTDOS.COM to make the corrections.

If you are using SmartKEYS to run utilities like VDE, ASM, Z8E, etc., consider adding the full search path in the return string to speed up their execution. As was mentioned in PATH descriptions, adding .COM to the return string also speeds things up. Remember also to put a blank space at the end of the command; this means you just press the SmartKEY and type the name of the file that is the object of the command. E.G. my SmartKEY I is A0:VDE.COM<space>.



THE DEVELOPMENT OF T-DOS

The "T" Stands for Tony!

by Guy Cousineau

EDITOR'S NOTE: The following article by Guy Cousineau was supplied to us by The ADAM News Network.

TDOS has a long story. This article outlines the steps which led to the development of this operating system. Although it may be of limited use to some people, it can serve to show just what you can do when you set your mind to it.

Several years back (I have no memory for dates), COLECO introduced the ADAM computer. At the time, it was one of the great buys in the home computer arena. Some of the early software that was available for it was CP/M 2.2. Unfortunately, when working with tape drives, CP/M was at best unfriendly. I had a look at it and said "what can I do with this?" and shelved it.

Several months later, Tony Morehen, a long time friend, bought an ADAM and became interested in CP/M. He worked on it from tape for a while; in the meantime, I was still working in BASIC. Once disk drives became available, Tony pursued his interest in CP/M and started work in improving the operating system, especially the BIOS which was not flexible enough to handle all the devices that were, by then, becoming available for the ADAM.

A patch for the BIOS was developed to provide support for a parallel printer. Then a patch to support single sided and double sided disk drives. A few more patches corrected bugs in the allocation vector sizes for the expansion RAM which was used as a virtual disk. A patch was also developed to provide support for 80 column video cards; previously, we used a 32 column TV screen. My interest in CP/M was growing, and I had acquired knowledge of Z-80 code through the total DISASSEMBLY and fixing of the BASIC that came with our machine. Modem programs became available for CP/M and we started acquiring CP/M software for the ADAM. One of the more useful one was a Z-80 assembler.

Re-writing the CCP

Tony embarked on a project which I thought at the time was a futile endeavour. He decided to re-write the CCP. As he worked on it, I helped him debug, re-write, and compress some of the routines. Finally, we came up with a 2K CCP which included a sorted directory function, a built-in copy command which supported 'du', direct drive/user change, and a few more items.

After having such success with that project, we decided to work on the BDOS. Tony looked at P2DOS, SUPER BDOS, etc. He found merits in all those but we thought we could do better. Basing ourselves on these fine systems, we developed a BDOS much similar to these two but dispensed, at the time, with keyboard scanning (which killed type-ahead) and time stamping. Automatic disk logging in was one of the main features we wanted. That first crack at the BDOS was relatively easy and we installed the new BDOS and CCP on our system..... now we were playing with power.

We were then ready for the big task... the BIOS. We worked on a combination 32 column /80 column system and re-wrote the entire BIOS, speeding up disk drivers, making support for 4 different disk formats which were now available. Now that we had the entire system in source code, we were finally able to get away from the SYSGEN - SAVE - DDT - LOAD - GO sequence which made patch installations very tedious. We could now append a SYSGEN function to the code which would install the entire system in one pass. By that time, we had discovered that the Video Display Processor was capable of handling a 40 column display. I started to work on patching that support code in... eventually, we dropped the 32 column mode altogether.

An installation program

Development did not stop there. Tony wrote an installation program which would ask you about disk drive sizes, serial port settings, default colours, macro key configurations, I/O byte settings, etc. prior to installing the system. Now the user did not need to install patches at all. When system configuration changed, they only needed to re-install the system.

SUBMIT was another thorn in our side. IT WAS SLOW! We worked on a new type of submit which worked like BAT files in MS-DOS. File date stamping was introduced. Support for 32 users became a necessity when we developed the software for a hard drive controller card. Finally, the installation program was made smarter by scanning the network and configuring the system based on the devices which it found. We added named directories which came in very handy on a hard drive.

We ran into incompatibility problems: different disk drive specifications, different hard drive interfaces, different clock chips, different 80 column installations, etc. TDOS is now available in several configurations to handle 80 or 40 columns, version 1 or 2 of the hard drive interfaces, hard drives with 4 or 5 partitions, etc.

Terminal installation also became a problem. Inexperienced users were having difficulty installing programs for 10 or so different 80 column terminals. We developed a standard header for ALL TDOS programs. Each user requires one terminal overlay which he can MLOAD to all our programs. We extended this approach to our generic CP/M development. This has made it quite easy for the average person to install and use our programs.

The complete TDOS

TDOS now comes with a complete set of utilities:

- ✓ change the user area of a file without copying it
- ✓ change directory by named directory
- ✓ sort directory but put NAMES first to speed up the change directory command
- ✓ prepare directory for date stamping
- ✓ format with sysgen and clear directory options
- ✓ set date (for those without clocks)
- ✓ I/O BYTE setting so we don't need STAT.COM
- ✓ logical disk size changes to temporarily read other logical formats search
- ✓ path modifications
- ✓ time/date directory with command line date mask

These utilities along with the TDOS system replace all the utilities which came with CP/M 2.2. We have also written several other utilities to help get the most productivity out of CP/M. Some of latest TDOS development include ZCPR. A few people use it but I find that with what we have in TDOS right now, we don't need to go to ZCPR unless we want to use some of the advanced features of that system. Our next project is to go to CP/M 3.x emulation by introducing bank switching and the other advanced features.

TDOS: Yours to share in

The nice thing about TDOS is that it is FREE. We would have done it just for ourselves anyway, so why not share it. Its development has taught me a great deal about machine language programming. I am also becoming an expert on writing FAST and COMPACT code. Now that I have the CP/M bug, I don't know why I would ever want to change operating systems.



A LESSON IN MIDI

Part III: An Explanation of MIDI Song Files

By Ron Collins

EDITOR'S NOTE: The following article is part three of five in a series of MIDI lessons by Ron Collins. The entire article was downloaded from the ADAM-X-CHANGE BBS and supplied by The ADAM News Network.

Let's get back to our song file. A few things happen when this song is played in. Suppose the song is being played in on a professional quality, full size MIDI keyboard. As the piano score is played, a special code is placed at the beginning of the line. This is a program change control code that tells the keyboard to use a piano sound. Each time the piano keys are played, certain other information is stored as specialized control codes with the music. As the music is played in, each note's value is stored. Also, how long a key is held down and how hard or soft it is struck gets placed in the music file. The music's timing and key information are also recorded to this track of piano music.

As the flute, cello and violin lines get played in, similar information is added to the song. Each channel (or track as most of us refer to them) will hold that instrument's data. When this song is played back on the same keyboard, it will be able to play the same song in almost the exact manner as it was played "live". The problem comes when you want to play the song on your keyboard or synthesizer. Unless you happen to own the same equipment used to play it originally, the chances of it's sounding the same are pretty remote.

Let's make it even more detailed. If you make a mistake when you are playing, that "sour note" you accidentally hit will have to be listened to as you play back that music right along with all the correct notes. This goes for hitting the key too hard or soft, a bit to fast or slow, or any number of nuances that will be captured into that MIDI data file.

On the "expensive computer" types, these and other factors can be fixed with a software program or hardware device called a MIDI SEQUENCER. The use of a sequencer is to a musician much the same as a word processor is to a writer. The sequencer allows an amazing amount of flexibility in composing. You could find that sour note you hit and simply delete it. You could also edit it a bit to make the correct note replace the wrong one. You can move parts of the song around, change the volume of the instrument to make it the center of attention or just a background part, make a more detailed change to place each instrument into a stereo field of left or right and even use special controller codes to turn on or off your stage light display!

The final stage of this song creation is to store it for any playback or future modification that might be needed. This was originally done using the keyboard manufacturers software to save each song using it's own proprietary format. This works fine for playback when it is always to be on the same brand and model of equipment. If you do not have the exact setup, however, songs do not replay with the same results.

In an effort to help, manufacturers, developers and the MIDI Manufacturers Association developed what is called Standard MIDI Files (SMF). These files contain all the information relevant to a song file you've developed, but stored in a more "generic" way. These SMF song files can be found in two forms: MF0 and MF1. The MF0 files group all of the information together into one big file for later playback. Any duplicate tracks are automatically merged into a single track. The MF1 type does the same thing, but there is no merging of tracks. This makes editing the file much easier than in the case of MF0 files.

There is still the problem of instrument distribution by the various manufacturers. Most adhere to the convention of making a piano sound the first instrument. From there on, though, they do a quick split up. Some carry a series of various piano types for the next several instruments, then move into some string types or even a few mixed horns, etc. Others start with the piano's voice and then go from there to

a vibraphone, harpsichord, and organ. A list of possible musical voices can be ordered in any way the one who designed it wanted. This isn't really a bad thing either. It just makes transporting MIDI song files between different types a more difficult proposition.

In hopes of heading the problem off before it gets worse, an organization called Warner New Media proposed what should make it much easier to deal with. Their New MIDI Standard establishes an array of 128 MIDI Program Numbers; each with a specific musical instrument assigned to it. These instruments are mapped into 16 families, with 8 instruments per family. Various sound effects I tend to use from time to time have also been included into their own family groups in this standard.

With all of this as a preliminary, how do we work with these files from other computer's and MIDI equipment? How do we listen to them at home using our own ADAM MIDI studio? Well, it's not a very difficult problem thanks to all the special programs and new utilities Chris Braymen has developed for ADAM users. Let's start with just the first string of programs from Bonafide Systems and then work into the newest programs.

Perhaps the best way to explain all of this is to just walk through a session or two. I'll start with how I actually get the MIDI song file onto my own ADAM and then work from there. With a bit of luck, you'll see how easy it is. There can be a lot of to do and a lot of steps to take getting the song file to play, but the work is well worth the results. Try to remember also that I am working these song files from scratch. Once I put them onto a public domain disk in ADAM format, the steps you need to perform to get the file into a likable format are simple and few.

The various bulletin board systems around the country can be a tremendous source of MIDI song files if you know which ones to call. I have found a few long distance boards dedicated to MIDI or with a MIDI data library section, but long distance charges do not really appeal to me (especially when my wife reads the phone bill and wants to know what "THAT ONE" is for... you know..."that one right THERE!"). Rather than having to "face the music", I'd rather be in a position to listen to it (grin)... so I tend to do most of my MIDI file hunting on the two commercial BBS's that I subscribe to; CompuServe Information Service and GE*nie. These two massive systems can accept calls from all over the country at baud rates from 300 to (in some cases) 9600 baud! They have MIDI data library and message areas and you can read descriptions of a song file or even reviews of it prior to actually downloading it.

Some information you will want to look for is the format of the song file. You will want to know how big it is, what system was used to create it and what instruments were designated. Most of this info will be available... but not always all of it. Just be prepared to "play" with the song a while to get it to sound as it should. In this case, I'll try to search for a song file on the CompuServe system. After logging on, I just type GO MIDI FORUM and press the RETURN key. In a few seconds, I'm taken right into the MIDI area set up for song support. There are various message areas and data library areas available to me here. I can get any questions I might have answered by simply leaving a note in their message base. Some helpful person will then read it and give me an answer. (How do I know it'll be answered? I've TRIED it (grin!))



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OVER THE PHONE LINES

All About CompuServe

by Rob Friedman / ADAM CP/M Sysop

EDITOR'S NOTE: The following article was downloaded from the CompuServe Information Service - Data Library 10.

What is CompuServe?

CompuServe is a national telecommunications network for any and all computer users. For ADAM users, it's a national meeting place and a central source of public domain software, both E.O.S. and CP/M or TDOS.

A Potpourri of ADAM related material:

We are located in the Computer Club Forum, one of the oldest forums on CompuServe. The ADAM is in sections 9 and 10, and have Data Libraries 9 and 10. Section 9 is ADAMania, for E.O.S. (SmartBASIC, SmartLOGO, GRAPHICS, etc.) and anything that can be downloaded via ADAMLink II (more on that in a bit). Section 10 is the ADAM CP/M section, usually requiring a CP/M modem program such as Madam7, MEX114, IMP, ZMP15, or QTERM42G (also, more on that in a bit).

As a meeting place, there are on-going discussions in the message bases, and in the weekly Sunday night (10:00 ET) conference (CO) where we exchange ideas, tell about new items for ADAM users, and just make friends. Both Tim Nunes and I are there almost every night, and are available Sunday night in the CO.

Also, in our Data Libraries, we have a wealth of public domain software, including the latest P.D. CP/M files (also available in the CP/M Forum). We have amassed an impressive amount of software including no less than six CP/M programming languages (E-Basic, E-Prolog, Tiny Pascal, Forth, Pilot, and Cobol) and we have the only place on CompuServe that the CP/M user (not just ADAMites) can download the Original Adventure Game known as the Colossal Cave. We also are a distribution point for TDOS, Tony Morehen's superb CP/M work-a-like. Our E.O.S. section combined with our CP/M section constitute the largest Data Libraries in the Forum for any one computer.

The Computer Club Forum can be reached on CompuServe at any "!" prompt by typing "GO CLUB". We look forward to seeing you there.

Is there more to CompuServe than that?

But, CompuServe isn't just a single Club for ADAM users. If you have other interests (which I hope we all do), you can find it on CompuServe. As I mentioned, ADAM users can also access the CP/M Forum (GO CP/M) and use almost any program on there. If you have an interest in other things, like science fiction, Midi software, religion, health, home business, and countless others, you will probably find a section for you on CompuServe. There are also the on-line multi-player games like Mega Wars, YGI (You Guessed It), and Island of Kesmai. You can also talk to people all over the U.S. and Canada, and lately around the world, on the CompuServe CB (where I'm a frequent visitor). Or, as in the film WarGames, you can book flights or check on flights with the OAG (Official Airline Guide - Electronic Edition). If you're doing research and you need information, there is also IQuest, an immense database that can send a printed copy to you or send a file via modem for numerous topics and previously published sources. Also, there is the Electronic Mall, where you can purchase almost anything from your home. Your home banking and financial needs can also be helped on CompuServe. CompuServe is the largest on-line information service in the world with over 500,000 members.

What is needed to join CompuServe?

To join CompuServe, you need:

- a) A modem.
- b) A terminal program (modem software)

c) A CompuServe Starter kit (available from most computer stores and major bookstores).

An incentive to check out CompuServe:

As a service, I have been distributing the public domain modem software programs: ADAMLink II, Madam7, and MEX, for the internal modem. My procedure has been a very reasonable one. I ask you to:

1. Send a formatted CP/M disk or digital data pack (or more depending on what you want) to:

CompuServe ADAM CP/M Sysop
Rob Friedman
3814 Ocean Ave. T-2
East Rockaway, NY 11518

(Note: ADAMLink II doesn't require a CP/M formatted disk or data pack).

2. Send return postage.

I'll send you a copy of the program so you can access the entire Data Libraries. I call the package MODEM.GIV and it needs (2) 160K disks. I also have two other "GIVaways". One I call EXTRA.GIV, which is simply more stuff. The other is a generic TDOS called TDOS.GIV. It will run on ANY ADAM and can be re-installed for any ADAM not running Micro Innovations attachments. Those come with TDOS. On C.I.S. and on several BBS's as well as printed in M.O.A.U.G. is an article called TDOS.GIV. Please let me know if you have any questions. You can find Tim and I on-line with these User I.D.'s:

Rob Friedman User I.D. = 76702,417
Tim Nunes User I.D. = 73307,215

Who else is available on CompuServe?

Also, Ron Collins is on-line technical assistance person. Along with Ron, some of our figures are Tony Morehen of T-DOS fame, John Moore of Madam7 fame, Pat Herrington who runs the Metro-Orlando ADAM User Group, Rick Lefko who is the author of numerous articles, Alan Neeley of the A-Net BBS's and the S.L.C. ADAM User Group, and numerous other ADAMites. If you have a problem, need to get a question answered, etc., etc., here are a number of ADAMites to contact:

ADAMite COMPUSERVE MEMBERS	USER I.D. #
Pat Herrington / M.O.A.U.G.	76357,1271
Tony Morehen / AJM Software	72057,3677
Rick Lefko / M.O.A.U.G.	70017,3535
Bob Zimmerman / P.S.A.N.	70027,1703
Chris Braymen / Bonafide Systems	70057,2035
Ron Mitchell / A.U.F.G.	70323,2267
Guy Cousineau / AJM Software	71052,1334
Tom Clary / TC Software	71330,3636
Ramen Griffin / A.A.A.U.G.	71370,676
Herman Cherney / Amercian Software Co.	71520,2623
Tom Keene / I.E.A.U.G.	72447,3546
Ron Collins / N.O.A.H.	73717,434
Jim Notini / N.I.A.D.	73457,161

So, come join the crowd. The hourly charge on CompuServe is \$6.00 per 300 baud and \$12.50 per 1200 or 2400 baud. There is no longer any prime time and non-prime time. I hope to see you there.

TYPE
TELECOM. UTILITY
RELEASED
JUNE 1992

ADAMLINK V

By HLM / GMK Hardware & Software Co.

Reviewed by Bart "ZONKER" Lynch

PRICE
\$24.95
MEDIA
DISK OR DDP

EDITOR'S NOTE: This review article was supplied to us by the ADAM News Network. Software ratings supplied by N.I.A.D.

Now, here's something I've been waiting on for a long, long time! It is mine own humble opinion that the AdamLink series of telecommunication software is some of the BEST ever written for our ADAM. As some folks feel about PowerPAINT, I feel about AdamLink. And thanks to the behind the scenes efforts of Herman Mason Jr. and the enormous programming genius of Rich Drushel, we now have the most recent update to the AdamLink family!

Some of you may be a little puzzled about the "V" designation in the software title. Why did it jump from AdamLink III+ to V? Good question. There WAS an intermediate stage called AdamLink IVa, the "a" standing for alpha. However, this was merely a TEST version and if I understand this correctly, Tom Clary (author of III+ and IVa) never got the amount of feedback from this that he needed to actually take it into production. However, a few copies were out and about. So Herman decided to go ahead and jump to "V" when bringing out this software.

And how did Herman Mason get involved in this? By being one of those dedicated ADAMites that won't let things lie! There had been some talk on the ADAM bulletin boards last fall concerning AdamLink and folks were wondering if there was ever to be an update. Herman finally decided to take matters into his own hands and he called Tom. The upshot is, that after much discussion, Herman acquired the rights to AdamLink. While Herman is no slouch in the programing department, he immediately thought of his friend Rich because Rich is well versed in machine language programing. The result is the disk that I'm happy to have in my hands!

So just what is it that separates this one from the others? Many improvements have been incorporated, some invisible and some highly visible! Here's a run down:

AdamLink V now supports external baud modems up to 9600 baud. When going directly from ADAM to ADAM, it is possible to achieve 19,200 baud! And not to worry if you own the 300 baud Coleco modem; AdamLink V still supports that! AdamLink V supports both the regular television screen or the 80 column monitor. It even supports BOTH at once! RLE (Run Length Encoded) picture files can be viewed on-screen from a bulletin board. This is handy so you can actually see the RLE before you download it. If you're like me, you have plenty of RLE files and it's nice to know if the file your looking at is one you already have, under a different name. Text can be printed on either the SmartWriter or Dot Matrix printer. Keyboard Macros. I really like this feature. What it means is, you can take any string of text and save it as one keystroke on your keyboard. Suppose I wanted to save something I use frequently, like my log-on password. With this, I can merely type in PASSWORD once and save it as a key. Next time I log on, I just need to press that key rather than type out my password. The macros can be created under any E.O.S. word processor, like good old SmartWriter.

AdamLink V will do file transfers of both the ASCII type and the XMODEM type. Another handy feature to have if you need to do

XMODEM transfers. A word of advice here. If you use the XMODEM feature to download CPM/TDOS programs, you will still need to transfer those to the CPM/TDOS environment in order for them to work.

AND the BEST new feature, the one I really love, is the ability to do a catalog of the media from within AdamLink V. I don't know HOW many times I've been on-line, ready to upload a file and I can't remember the EXACT wording of the title! With AdamLink V that is no longer a problem. And speaking of filenames, here's another good feature. AdamLink V will allow you to name the file whatever you wish, as long as it's ten characters maximum. This was not the case in earlier AdamLinks. I remember way back when I first started using a modem. There was a BBS in Memphis that carried an ADAM section. It was run on an IBM, but the sysop was kind enough to have an area for us ADAMites. He also carried program files for us. Well, the files were in IBM named format. There was one called, oh I don't know, FUN.BAS, the .BAS meant it was a BASIC file. Try as I might, I couldn't download it. I thought I had to NAME my file the exact same name and AdamLink II wouldn't accept it! So it's good to know that AdamLink V would have!

There are a few improvements that aren't even mentioned in the documentation that I consider wonderful. These eliminate at least two of the bugs that were present in earlier AdamLink versions. The first one is probably one that hasn't even affected other AdamLink owners or at least I've never heard any complaints about it. I do a lot of my "modeming" on the A-NET bulletin board systems. When I would contact them via AdamLink IVa, I would get a strange character on my screen in 80 column mode. It would show up whenever the A-NET would clear the screen and present new text. I would always get a <CONTROL L> character on my screen! Not a calamity by any means, but just plain irritating. With AdamLink V this no longer happens.

A much bigger bug that has been eliminated is this. When AdamLink was first patched to accommodate that higher speed external modems, it presented a problem with capturing text files or even in plain downloads. The problem was, when AdamLink paused to write to disk then went back to capturing the information, a burst of characters would suddenly chase across the screen. These characters would write to disk BACKWARDS for about the first ten or so captured. When one would print out the file later, it would look truly awful. But ADAMLINK V does the downloads and captures perfectly! I heartily congratulate the authors on this. It makes my life considerably easier, to say the least!

The combination of all of the above makes for one smooth running and terrific piece of software. And that isn't even the beginning! When you buy AdamLink V, you get a coupon entitling you to one free upgrade in the future. The two upgrades that are currently in the works are compatibility with the Micro Innovations' M.I.B.2 and compatibility with the Trisyd Video's SYDMODEM 1200.

Great care has been taken to bring out this software and a lot of hard work went into it. All of this shines through in this fine product. At the price of \$24.95 (U.S. funds) with the free upgrade coupon, this is a "must have" for those serious about using their modems. I give it my highest recommendation! And happy MODEMing.

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SMARTLETTERS & FORMS (DP)	\$9.95
SMARTLOGO (DP)	\$15.95
SMARTTERM V1.02	\$15.95
SMARTWRITER ELITE	\$19.95
SMARTWRITER'S HELPER	\$10.00
SOFTPACK I V2.0	\$18.95
SPEEDYWRITE V2.0	\$39.95
SPEEDYWRITE SPELL (64K)	\$24.95
SPELLINGAIDE	\$19.95
SUPERBASIC PLUS	\$9.95
TAX HELPER 1991 (64K)	\$19.95
VIDEOTUNES	\$24.95

GRAPHICS DESIGN

ADAM GRAPHICS FOR IBM (DISK)	\$19.95
BOLD GLORY	\$16.95
BORDERSPLUS for PrintWORKS	\$10.95
CHROMANTICS	\$16.95
CLIPPER	\$15.95
COLECO GRAPHICS PROC. (CART)	\$39.95
FONTPOWER	\$14.95
GRAPHIXPAINTER	\$19.95
GRAPHIXPIX I	\$14.95
GROOVY GRAPHICS	\$14.95
IBM CLIP-ART FOR ADAM VOL. I & II	\$14.95
M&M GRAPHICS	\$9.95
PAINTAIDE with the SWIFT FONT KIT	\$16.95
PERSONAL CALENDAR UTILITY (64K)	\$19.95
POWERPAINT (64K)	\$29.95
POWERTOOLS	\$16.95
SHOWOFF I	\$18.95
SMILEY FACE: WHAT AN ATTITUDE!	\$9.95
SPRITEPOWER	\$15.95
SWIFT LABEL PRINTSHOP (64K)	\$19.95
SWIFTPRINT (64K)	\$15.95
YULE TOOLS I	\$16.95

VIDEOGAMERS

As we all know, the ADAM is also a Colecovision Videogame System. This means that the over 100 cartridges made for the Colecovision Game System will also work on the ADAM. For the last six years, TeleGames U.S.A. has been distributing over 60 Colecovision cartridges as well as cartridge games that have been converted to disk or data pack format (we highly recommend Boulder Dash, Rock'N Bolt and Alcazar). They have also developed a number of new games through their In-House programmers. For their latest catalog of products available for the ADAM and Colecovision call or write to:

TeleGames U.S.A.
Box 901
Lancaster, TX 75146
(214) 227-7694

\$4.00
DISK

N.I.A.D. PUBLIC DOMAIN SOFTWARE PLEASE NOTE: Specify VOLUME #, TITLE and DISK OR DDP

\$6.00
DDP

MISCELLANEOUS VOLUMES

SMARTBASIC BNDV # 1 - 36: 36 different volumes containing assorted SmartBASIC entertainment, application, graphics, patch, utilities and other misc. programs. Most volumes are auto-booting and contain SmartWRTTR documentation.

SMARTBASIC UTILITIES UNDV # 1 - 2: 2 different volumes containing SmartBASIC utility programs such as file copiers, backup utilities, patches and other misc. programs. Volumes are auto-booting and contain SmartWRTTR documentation.

SMARTLOGO LNDV # 1 - 5: 5 different volumes containing SmartLOGO entertainment, application, graphics, utilities, patches and other misc. programs. Volumes require the user boot SmartLOGO first, contain SmartWRTTR documentation.

ADAMCALC ANDV # 1 - 34: 34 different volumes containing ADAMCALC spreadsheet formulas, tutorials and demonstrations. All volumes require the user to boot ADAMCALC first and contain SmartWRTTR or ADAMCALC documentation file(s).

DCPM 2.2 CNDV # 1 - 60: 60 different volumes containing CPM 2.2 utilities, games, interpreters, patches, compilers, word processors and other misc. programs. Volumes require the user boot CPM 2.2 first, most programs contain documentation.

CPD SIGNS SNDV # 1 - 3: 3 different volumes containing SignShop/NEWSMAKER graphic files for use with these programs by Strategic Software. Volumes require the user boot SignShop/NEWSMAKER first and contain SmartWRTTR documentation.

FINBALL GAMES FNDV # 1 - 7: 7 different volumes containing Pinball Construction Set pinball games which were designed with this public domain program by Coleco. Each volume is auto-booting and contains SmartWRTTR documentation.

VIDEOTUNES SONGS UNDV # 1 - 3: 3 different volumes containing many assorted song files each that are for use with VideoTunes by FutureVision. Each volume requires the user to boot VideoTunes, then load the song file.

MIDI SONGS MNDV # 1 - 16: 16 different volumes containing many assorted song files each for use with Mini-Recorder by Borntide Systems for the MIDI-MATE.

SOLO-ADVENTURE PACK VOL. # 2 - 3: 2 different volumes of Solo Adventures for use with Mage Quest by Reedy Software. Each volume requires the user to boot Mage Quest first and contain SmartWRTTR documentation.

DIAD BACKISSUE INDEX: SmartFILER database detailing the contents of past NIA.D newsletters through 1987. Requires that the user boot SmartFILER first.

DUKKS MINI-REVIEWS VOL. #1-2: 2 different SmartFILER databases with mini-reviews of hundreds of software and hardware products. Requires that the user boot SmartFILER first and then follow the included instruction sheet on how to access.

COLECO PRESENTS: SOFTWARE: Coleco self-booting database program containing lists of planned Coleco software and cartridges for the ADAM and ColecoVision DDP ONLY.

DI.N.I.A.D. GOLD VOL # 1 - 5: 5 different volumes of enhanced SmartBASIC programs: Vol. I - Games, Vol. II - Text Adventures, Vol. III - Science & Education, Vol. IV - Home & Business and Vol. V - Utilities. Each volume contains documentation.

DADAMAGIC ONDV VOL. # 1 - 18: 18 different volumes of commercially copyrighted programs that were released to the Public Domain. Contains entertainment, adventure, productivity, education, business, telecommunications, arcade, brain, etc., programs complete with documentation.

GRAPHICS VOLUMES

DRLE PICS VOL. # 1 - 4: 4 different volumes of RLE picture files which can be viewed in SmartBASIC V1.0 with the included GbPic/AST program or in PowerPAINT, also contains SmartWRTTR documentation.

DREDDY ART GALLERY VOL. # 1 - 2: 2 different volumes of 13 SmartPAINT format picture files to be viewed in SmartBASIC V1.0 with the included loader program or in PowerPAINT and other programs which support the SmartPAINT format.

DN & B PIX VOL. # 1 - 30: 30 different volumes of 13 SmartPAINT format picture files to be viewed / edited in PowerPAINT, ShowOff, etc.

DPAINMATES VOL. # 1 - 15: 15 different volumes of clip-art, sprite and font files for use with PowerPAINT, SpritePOWER and CLIPPER by Digital Express. The Print Works or the Label Works by Walters Software Co., and other assorted programs.

DPAINFORMS VOL. # 1 - 4: 4 different volumes of assorted letterheads, labels font files and miscellaneous graphic files for use with PowerPAINT by Digital Express.

DC.G.P. PIX VOL. # 1 - 3: 3 different volumes of picture files for use with the Coleco Graphics Processor. All pictures are taken from Coleco / ADAM programs, and cars through the use of the cartridge version of The Coleco Graphics Processor.

DPAIN PALETTE: For use with PowerPAINT. Will provide you with over 200 different shades of color, where normally the total number of colors accessible is 16. Contains SmartWRTTR documentation.

ENTERTAINMENT VOLUMES

DSUPER BUCK RODGERS: This is the supergame which comes with the ADAM Computer and is offered here for replacement in the case of damage to your original. **THE BEST OF ELECTRONIC ARTS** (Pinball Con. Set / Hard Hat Mack). Coleco supergame pack contains two great games in one package. New bug free version w/ 2 demo pinball games and an instruction sheet. Add \$4.00 for 40 Page manual.

DSUPER SUB-ROC: Coleco supergame pack version of the Sub-Roc cartridge. This is a tremendous 3-D arcade action game with great graphics and a Hall of Fame option as well as an instruction sheet.

UTROLL'S TALE: Coleco supergame pack originally developed by Sirius Software. This is a children's adventure game with good graphics and offers a strong challenge as well as an instruction sheet.

JEOPARDY: Coleco supergame pack of the popular television game show. Fabulous game with great graphics, multi-player ability, load / save games and a Hall of Fame options as well as an instruction sheet.

TEMPLE OF ASHAI Revision 2: Epyx supergame pack which was never released. This is a role playing adventure with graphics and some arcade sequences. Disk and DDP not compatible. Comes with instruction sheet.

DA-CHESS (SARON): Great graphic chess game which was developed in CPM and modified by Chris Baymen. Comes on an auto-booting media and includes documentation on how to use.

DISCREEN DONKEY KONG JR.: Coleco's In-House version of Super Donkey Kong Jr. with an additional 5th play level. MARCOS BAKERY (arcade version doesn't even have this level!). This version automatically runs through all screens.

CHESS SOLITAIRE: Great graphics version of chess where you try to guess the moves of the masters (15 different classic games are included). Also contains a second game, Knight's Tour, and documentation in program.

DSUPER DAM BUSTER: Supergame version of the cartridge with added screens and Hall of Fame. The only flight simulator available for ADAM and one of the best games ever made. Are you good enough to defeat the NAZI forces?

THE BEST OF B.C.: A two supergame pack with B.C.'S QUEST FOR TREES and B.C. II: GREG'S REVENGE developed by Coleco of Canada. Help Thor past obstacles to find Cite Chic and to find the Meaning of Life.

DMOJUG PHRASE PAK: An additional 300 phrases for use with Phrase Craze by Reedy Software. Compiled by George Drank. Contains SmartWRTTR documentation.

THE ABOMINABLE SNOWMAN: Search the Great White North for the illusive Abominable Snowman. Be careful in your quest, there are many pitfalls that you will face. Contains SmartWRTTR documentation.

CLASSIC UNRELEASED CARTS VOL. #1: A collection of 8 cartridges: Fall Guy, Video Hustler, M.A.S.H., Super Cobra, Memory Manor, Word Feud, Artillery Duel and Torpedo the Barbarian which were never released or wouldn't work on the ADAM. In their cartridges form. Contains SmartWRTTR documentation.

CLASSIC UNRELEASED CARTS VOL. #2: A collection of 3 cartridges: Cabbage Patch Kids, Adventures in the Park, Enhanced, Yoke's on You and Wizard which were never released. Contains SmartWRTTR documentation.

DADAMWARS II: A simulation of the real life pitfalls and successes which are experienced by you friendly ADAM retailers. Great graphics and sound effects. Contains SmartWRTTR documentation.

DSUPER FRONT LINE DEMO: A Coleco In-House demo of the never completed supergame version of the cartridge game. Demo cycles between two demo screens.

UTILITY VOLUMES

DE.O.S. DISK MANAGER: Coleco utility program which was supplied with the 5 1/4" 160K Disk Drive. Also, contains the most current Coleco EGS Revision, Rev. 7.

DSPPEED CHECK V2.0: Enhanced Coleco digital data drive test program to assure proper speed operation of drives for best read / write performance. Best results will occur by purchasing disk from us instead of ddp and then copying over to ddp.

DADAM UTILITIES: Coleco In-House utilities, test and demo programs contained on an auto-booting media. Memory expander required for some of the system testers. Also, includes Adam Diagnostics and an instruction sheet.

DMACADAM: 2801 ASssembler and an instruction sheet.

DSTRATEGIC SOFTWARE PATCHES: SmartBASIC V1.0 programs for patching Strategic Software's SignShop, NEWSMAKER, MULTIWRTTE, MICROWORKS, etc. programs for use with dot matrix printers as well as major enhancements made to the MultiWrite Word Processor. Contains SmartWRTTR documentation.

DCOLECO GAME COPY: Coleco In-House cartridge copy utility as well as a media backup utility rolled into one program. Will copy most of the available cartridges.

DSHAPEMAKER: Great SmartBASIC V1.0 utilities for creating shapes and placing text on the HGR or HGR2 screen. Shapes created can be used in PowerPAINT. Contains SmartWRTTR documentation.

DMEDIA MATTE: Three tremendous utility programs for editing data packs and disks in SmartBASIC V1.0. Contains informative SmartWRTTR documentation.

DQUICKOPY V5.0: Excellent machine code copy program (block and file) with additional ramdrive and ramcopy software. Compatible with all memory expanders and disk drive sizes. Contains a 37 page manual in SmartWRTTR format.

DCOLECO IN-HOUSE PROGRAMS: Six separate programs: three diagnostics programs along with the Tunnel'n Tools, ADAM and MAME demos.

DMIDI DRIVERS & DEMOS: A collection of MIDI SmartBASIC V1.0 utilities programs along with technical information of the MIDI file setup. Contains

SmartWRTTR documentation.

DSOFTWARE BACKUP V1.0: Allows for the backing-up of bootable programs onto the same media. Up to six self-booting programs can be placed on one Software Backup media. Most programs work. Contains SmartWRTTR documentation.

DR.I.D. TEST: Coleco's own In-House utility designed specifically for testing the operation of the 5 1/4" 160K Coleco made disk drive. No technical knowledge required, just boot-up and wait for the results. Contains SmartWRTTR documentation.

DMIDI UTILITIES: A collection of 6 mpm utilities, midi format 1 song files, SmartWRTTR documentation files and 1 CPM or TDOS compatible midi utility. All mpmper utilities are SmartKEY driven and machine language programs.

PRODUCTIVITY VOLUMES

DADAMLINK II: Coleco's advanced telecommunications software with all the features of ADAMLINK I and the added ability to up and download ASCII files. Comes with addendum instruction sheets to the ADAMLINK I manual.

DMARKET MONITOR: Coleco of Canada management system program for the personal investor. Not totally bug free. Contains SmartWRTTR documentation.

DTAX PLANNER: Coleco of Canada business software which will create a clearer and more complete picture of your tax situation. Contains SmartWRTTR docs.

DVISI-SPRITE V6.0: Advanced sprite development package with many powerful built-in features. This is the supplemware version of the copyrighted version 6.5 and is made available for demo purposes and a chance to test out before buying V6.5.

dDAVINCI: Great graphic design utility from France using a point-and-click method of operation along with a SmartBASIC V1.0 utility to convert dAVINCI files into graphics/PAINTER files. Contains SmartWRTTR documentation. DISK ONLY.

DX-10 CONTROL SOFTWARE: Home appliance control / security system software. Requires a Serial Interface, Serial Cable and the X-10 Hardware. Contains SmartWRTTR documentation.

DCOLECO GRAPHICS PROCESSOR: Coleco's graphic design utility used to create graphics for cartridges and supergames. Now, on an EGS media. Instructions are provided as well as a picture file conversion program. Requires memory expander.

DDOS V4.58: Super enhanced version of CPM 2.2 which operates much like MS-DOS. Adds many new features. On 2 - 5 1/4" Disks \$6.00 (specify 160K or 320K). 1 - 3 1/2" 720K Disk \$4.00. call for Data Pack version. Manual In Doc file. Printed 40 page manual is \$4.00 extra.

DSmartBASIC V1.0: Coleco's original SmartBASIC which came with the ADAM. This is available for replacement on DDP / Disk and has been enhanced for disk owners.

DSmartBASIC V2.0: Coleco's extended / enhanced version of SmartBASIC V1.0 (48k versus 28k) with memory expander access, but is not fully compatible with V1.0. Contains SmartWRTTR documentation.

DFRENCH BASIC: Great modification of SmartBASIC V1.0 with demos. Must have version for the serious programmer that includes 10 new commands for using sprites, windows, easy color changes, etc.

DSmartBASIC V2.1: Nice modification of SmartBASIC V2.0 that adds macros for string inputs, formatter and backup programs. Contains SmartWRTTR documentation.

DSmartBASIC V2.0 40 COLUMN: 40 column text version of SmartBASIC V2.0 which works in STDWEM or EXTWEM modes. No longer do you have to bother with a non-standard 31 column screen. Contains SmartWRTTR documentation.

DAUSTRALIAN SMARTBASIC: Enhanced SmartBASIC V1.0 with SMARTKEY display of some of the most often used SmartBASIC commands (ie: RUN, LIST, SAVE, etc).

DADAM FORTH V1.1: ADAM compatible version of the popular programming language. Comes with a number of programs on media and instruction sheet.

DRACKER: Allows for the tracking of Hurricanes in the Gulf Coast area. Enter 14 x and y coordinates and then save them as a file or view the hurricane in action on the high-resolution map of the area. Includes SmartWRTTR documentation file.

DSP-1 CUSTOM PRINTER SOFTWARE: Specialized software patches for use in SmartWRTTR. Used to inbed software commands. Available for the following printers: Resonance 1080 / 81 / 82 / 83, Star G10 / G20, Epson FX / RX, Blue Chip, Olympia R60, Brother 2024-L, Smith Corona Faxstar 80 / DZ000, Ok 182 / 182.

DBASEBALL STATISTICIAN: Comprehensive stat compiler for pitching, batting and team statistics with full line of edit features, save option, print features for ADAM Printer or dot matrix with Wizard's Lair. Comprehensive instructions in SmartWRTTR.

DSmartBASIC CONSTRUCTION KIT: Designed to aid the novice programmer better understand the many commands resident in SmartBASIC V1.0. Fully menu driven and auto-booting. Contains SmartWRTTR documentation.

DDAWGONE DAWGS: This program will, on a consistent basis, select the dog most likely to win at the local dog track through data that is inputted by the user. However, this is not a get-rich-quick scheme. Contains SmartWRTTR documentation.

DSimplePAINTER With Simple FAX: A tremendous collection of graphics utilities which extend the capability of PowerPAINT along with a number of conversion programs. Contains SmartWRTTR documentation.

DFLASH FACTS: MUSIC STUDIES: Eight flashcard files for use with the Electronic Flashcard Maker by Coleco dealing exclusively with music theory. Requires the user boot E.F.M. by Coleco first and contains SmartWRTTR documentation.



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" For GOD so loved the World that he gave his one and only SON, that whoever believes in him shall not perish, but have eternal life. For GOD did not send his SON to condemn the World, but to save the World through him. " John 3:16

N.I.A.D. NEWSLETTER FOR —————>

Member # ----->02983sp1t912075
 Steve Pitman
 3705 Church St.
 Cincinnati, OH
 45244

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