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Well NIAD members, Spring can't be far off - it is March already !
Continuing our study of Ephesians: Chapter 3, verses 1-7 describe
the Apostle Paul's mission to preach to the Gentiles (non Jews) and
how God chose him for this purpose. Starting at verse 8 - "To me,
though I am the very least of all the Saints, this grace was given,
to preach to the Gentiles the unsearchable riches of Christ, 9 and
to make all men see what is the plan of the mystery hidden for ages
in God who created all things; 10 that through the church the
manifold wisdom of God might now be made known to the principalities
and powers in the heavenly places. This was according to the
eternal purpose which he has realized in Christ Jesus our Lord, 12
in whom we have boldness and confidence of access through our faith
in him. 13 So I ask youy not to lose heart over what I am suffering
for you, which is your glory."

These verses are very significant in that they define God's PLAN,
which has been a mystery for ages. This PLAN is that through Jesus
Christ (Note that all of God's plans and purposes are achieved
through His Son Jesus), God's Church of believers will be
established on the Earth. This Church is not a physical or
denominational church, but is the entire body of people who have
accepted Jesus as their Lord and Saviour. This Church of God's
people will become so spiritually strong through unity, that God's
plan of salvation will be made known to all people and even to the
"...principalities and powers in the heavenly places." The
reference to these powers in heavenly places actually refers to
Satan and his fallen angels and this verse states that we as
Christians will be the ones who "show" them who is boss and that we
have won the fight, not him !!
As verse 11 states, we have this boldness and confidence based only
on our faith in Jesus - it is only through him that we can be
conquerors.
Verse 14 - " For this reason I bow my knees before the Father, 15
from whom every family in heaven and on earth is named, 16 that
according to the riches of his glory he may grant you to be
strengthened with might through his Spirit in the inner man, 17 and
that Christ may dwell in your hearts through faith; that you, being
rooted and grounded in love, 18 may have power to comprehend with
all the saints what is the breadth and length and height and depth,
19 and to know the love of Christ which
surpasses knowledge, that you may be filled with 11the fulness of
God. These 6 verses define some important facts:

A) God is the one responsible for creating every being that lives B)
As a result of his power and glory, He freely gives us the
opportunity to be strengthened "inside", by His Spirit. You see,
true strength only comes from the inside. Many of us exhibit a
false strength by "acting" strong, when inside we are unconfident
and afraid. The strength and confidence that comes from accepting
Jesus as your Saviour is a true strength that is inside and not one
that is based on outside circumstances. I can personally attest to
the fact that this God given strength is the way to go !
C) All it takes for Jesus Christ to dwell in your hearts is faith -
in other words just believe that once you ask Him to, He will be
their.
D) Love needs to be the "root" of our actions and behavior. Love
for man is what resulted in God sending Jesus to die for us and love
is the medium through which God works. Verse 19 states that the
"...love of Christ...surpasses all knowledge...". This can be
translated as "the love of Christ is unbelievable" and it really
is. Jesus gave up his place of glory in heaven, took on human form
with all our weaknesses coming as a helpless baby into an unfair
world, was the most loving and kind man that ever lived, and died a
horrible, inhumane death for crimes he did not commit.
Won't you let Jesus' wonderful love touch you and strengthen you on
the inside ?
God bless you all.

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CONTRIBUTORS: W. Motel; C. Kolander; B. Lennes; D. Zimmerman
              P.R. Dick

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NIAD — A CHRISTIAN RUN BUSINESS

. Greetings/ New look — I hardly know where to start, there are so many things to tell you !
Hope you like our new printing. I am using the Panasonic 1080 printer and the Eve SP-1 parallel interface which gives me more flexibility from SMARTWriter. It appears more readable to me, but let me know what you think.

. Software/ Hardware — Firstly, I have found a source for ADAM software and am stocked with most titles. The ones that are difficult to find some of the newer ones - Family Feud, 2010: Text Adventure, etc. I spend alot of time on this and am sure I will come up with something.
Hardware is more of a problem, I am able to obtain disks and modems in small quantities on an ongoing basis, as many of you know we have set up a waiting list for both of these products. (NOTE: As of 2/21 I have enough disk drives coming in to fill all of the orders on the waiting list.) We have also purchased a number of the disk drives at retail here in Chicago and are selling them for $225.00 for those of you that do not want to get on the waiting list for our regular $185.00 price. Rumor (reliable) has it that Coleco is now manufacturing more disk drives which should alleviate this problem - hang in there ADAMites !

. Reviews — This issue is loaded with great reviews. We are so impressed with PAINTMASTER from Strategic software. It is one of the best, if not THE best program yet produced by a third party developer - see Wayne's comprehensive review. Wayne also reviews another Strategic program, TURBOLOAD, which is a necessity for the the Basic nuts out there.
. Strategic has two more great programs in the works - see UPDATES section.
. See our reviews of two super books for the ADAM. The BASIC ADAM is the best technically oriented book for the ADAM that is out in my opinion.

. SmartBEST — Data Doctor is starting a series of SmartBEST Workshops beginning this issue to help the many NIAD members who have purchased this excellent ehancement to the SMARTBasic that came with your ADAM.

. Eve 80 Column — We just received a prototype of the EVE 80 column to review.

                    The addtion of this peripheral makes the ADAM a true commercial computer when using the CPM 2.2 operating system.

SmartBasic 2.0 — . We have a working version of SMARTBasic 2.0 that we are testing and evaluating. We are talking to both Coleco and Lazer Microsystems (who actually wrote SMARTBasic) to obtain permission to release it into the Public Domain. The major advantage of 2.0 is that the 64K memory expander is used as real memory space

Please don't call me on 2.0, as soon as we have clearance to release it (assuming we get the OK), we will let you know. Also, there is no documentation with it, which must be written.

. Telephone call ins — are becoming a problem. As many of you know, we now have an answering machine (frankly I don't like these, but was forced to add one to handle the volume of calls). We want to service all NIAD members and hence please observe the following phone rules:
. ORDERING - Unless you have a rush request, I would prefer you mail orders in rather then call them in. If you have questions you need answers to before ordering then you may call your order in. If you do call in orders please DO NOT call on Saturday AMs so the lines can be open for Technical questions. You may call each day from 11:00 AM to 3:00 PM Chicago time with your rush orders. You may also leave orders on the answering machine, but if you do please make sure to leave your name, address, phone number and charge card number.
. QUESTIONS - Many of the questions asked over the phone could be handled via letter, especially if they only require a yes or no answer. I would appreciate it if you sent in your questions, leaving a space under each question for me to write the answer and please include a self addressed stamped return envelope. Technical info/ questions - Please reserve Saturday morning for these types of questions.
. PROBLEMS - Problems you have with our products, orders, etc can be called in anytime. We usually have the phones manned during the day from 11:00 AM Chicago time until 3:00 PM. If you get the infamous NIAD answering machine, state the problem and leave your phone number and we will return your call.

. Data pack Duplications — I have had two letters from people who ordered the manual we referenced on how to make your own data packs from regular cassettes from Lines of Force Communications in York, PA and did not receive them. Charles Summers from LOF Communications has indicated to us that they are correcting the problem.
For your information, a NIAD member also offers a manual (22 pages)convert audio cassettes for $ 15.95 and sample tapes for $4.00. Please contact him for more information:
Rex B Dominguez
613 Lasalle Ave
San Francisco, CA 94124

. Product ordering —
We have literally been swamped with orders recently and have has some problems getting products such as ribbons, tractor feeds and printer stands, and data packs. As of this writing we now have a good supply of all these items in stock.
We have also been swamped with orders for the new PD games and disk conversions.
A note on the disk conversions - Family Feud, Flashcard Maker and Best of Broderbund can be copied directly to disk by any of the available copy programs i.e. you don't need the special disk conversions:
Here is the list of programs that we have disk conversions available for: (Remember to send in the card insert from your data pack for each game you want converted and $4.00:

SUPER ZAXXON
DONKEY KONG AND DONKEY KONG JR
DRAGONS LAIR
2010: TEXT ADVENTURE
BUCK ROGERS
RECIPE FILER
SMART LTRS AND FORMS

. Eve has just completed a monitor conversion for the Coleco Expansion module. See our review in this issue. The kit is available for $29.95 if you want to do it yourself, but you need to have soldering equipment and experience. You could also have a local TV repair shop do it for you or Eve will do the whole job for $49.95.

. We have added a new PD program that does a hardware checkout on the ADAM's components - console, keyboard, printer, tape drive, etc. It only indicates if they are working properly or not, not what the problem is if they are not working.

. What seemed like a good idea at the time has become a problem. The Nylon Long Life ribbons seem to work fine in some of the ADAM printers, but not others. Evidently there must have been a design change at some point. We have been trying to work with the manufacturer but to no avail. Hence, we are dropping the Long Life ribbons from our product list. We have substituted the regular Coleco carbon ribbons for all recent orders for the Long Life. For those of you that have used them with no problems, we can special order them for your if you like.

. New Products now carried my NIAD include:
- Paintmaster
- Turboload
- PowerPrint
- SignShop
- SmartTRIX I
- Disk conversions as mentioned above
- The Coleco ADAM Users Handbook
- The Basic ADAM Book
- Hardware Checkout PD program
- Card Edge connector to attach the Autodialer to the Eve Multi unit cable
- Tape drive head cleaning kits
- Loran data packs

. Renewals — Get your renewals in early to insure you don't miss any issues. For those of you whose member # (above your name on the mailing label) begins with "0286" this is your last issue.

. NIAD BASICS
. New members subcriptions are started with the last issue published.
. Back issues of the NIAD newsletter are available for $3.00 each and I would recommend you purchase them for the reviews and workshop information.
. Telephone call ins for TECHNICAL questions ONLY are taken Saturday AM's from 8:00 to 11:00, Chicago time.
. Regarding Product ordering -
Send a money order or chargecard number if you want to expedite your order on all first time orders (Note: Established

members may pay by check without the 10 day delay).

. If you order items that are shown as not yet available at the same time you order other items, you will be charged two shipping charges unless you specify that I should hold your order until all items are available.

. If you want me to ship to a Post Office box, include the shipping charge for US Mail since UPS does not ship to PO boxes.

. All shipments to Canada and Hawaii are charged the US mail 1st class rate.

. Please call me before returning any merchandise.

. If I am backordered on an item that is not shown as "not yet available", I will fill the rest of your order and send the backordered item when received (with no additional shipping charge).

. If you are having trouble receiving your newsletter via third class mail, you may upgrade to 1st class delivery by sending in $ .50 for each month remaining in your subscription (expiration month is the first 4 numbers of your membership number on your mailing label).

. A list of all the program names in our Public Domain list may be obtained by sending in a self addressed stamped envelope with your request.
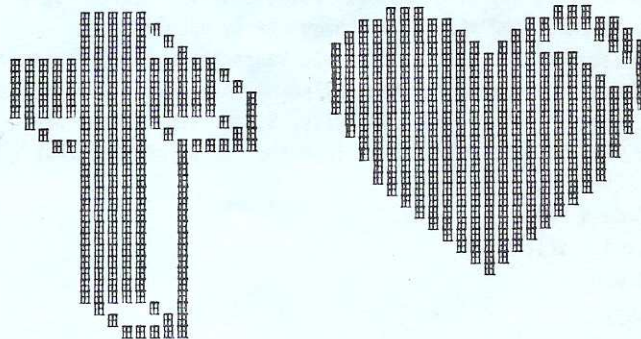
. Please send in your questions with a space underneath each one so we can jot down an answer for you. Also include a self addressed stamped envelope.

. Please only call in orders if you have a question that needs to be answered or it is a real rush.

UPDATES

. SmartTRIX is now available. This is an excellent set of programs, routines and TRIX for the Basic programmer. The manual is quite extensive and packed with a wealth of information. Data Doctor has done it again and is keeping up their fine reputation for producing quality ADAM software. We will have a full review in the March issue.

. Strategic Software has just shipped a new program called Signshop which is patterned after the Broderbund best seller Printshop. You can design charts, signs, logos and more on your ADAM and print them out on your ADAM or dot matrix printer. The following is a photo reduced sample. We will review next issue.

. Strategic Software is also finalizing a new Word
processing program called MultiWrite. This program is designed
to be an improvement over SmartWriter, providing additional
features. Strategic had considered dropping this project, but
is now going full bore to complete it as soon as possible. One
of the main features of MultiWrite is the ability to have 64
characters horizontally. Those of you who have been
dissatisfied with SmartWriter will soon have an alternative.
By the way Strategic was also the company that developed
SmartSpeller, a spelling checker program. However, they have
dropped this program due to slowness and the fact that it was
limited to a small number of words.

. The Eve 80 column video board is finally here after a
long wait.

. We just received a new piece of software from a company
called APE Software in Canada. This package contains 5
games in Basic that are excellent, both the games themselves
(Backgammon, Battleship, 3-D Tic Tac Toe, etc.) and the hi res
graphics. We will review next issue.

. G. Gabarik has written a versatile copy program in machine
language that is very fast - QuickCopy will be covered
in the March issue.

. Honeywell is still saying that they will repair the
ADAM disk drives. It is just a matter of time until each
service office is set up to do it. I understand that some of
the Honeywell centers out East have already begun to service
them.
Additionally, Adahk, Inc is servicing the ADAM disk drive if
the problem is in the drive unit itself. Call them at
315-656-3988 for information. They are located in East
Syracuse, NY.

. John F. Busby is doing alot of ADAM work in Florida.
He has produced some keyboard overlays for various software
products and even an ADAM iron on decal !!
He has started a small local user's group. Contact John at:
6634 SW 41st St
Davie, FL 33314   305-792-6827

. The ADAM Resource (publishers of the ADAM Resource
Directory) is planning the next release of the Directory, which
will be published annually with quarterly updates.
They ask that every ADAM owner who wants their name published
in the next release send the following information by April 1st
(no foolin !): Name, Address, City, State, Zip, Phone, Age.
Also send in just the numbers from the following list that will
describe their interests:
1. Owns a modem
2. Owns a disk drive
3. Basic
4. Logo

5. CP/M
6. Machine language
7. Graphic games
8. Text games
9. Educational
10. Business
11. Word Processing
12 Utilities
Send a post card with the above information to : ADAM Resource;
Department 60; Box 90; Seelyville, In 47878.
Also, for every one who orders the current 1985 edition during
March and April a coupon will be sent that will provide a
special discount off of the 1986 edition.

. The Kansas ADAM User groups are having a Public
Domain software contest !!
Win $100.00 for top, overall best program. A panel of five,
non- ADAM owners will judge the program in the following areas:
- SMARTBasic best use of sound and graphics - $25.00
- Best home/ business/ finance - $25.00
- SMARTLogo best use of sound and graphics - $25.00
- CP/M 2.2 best system translation - $25.00
All software will go into KAUGs PD software library and the top
winners will be uploaded onto various bulletin boards. Send a
SASE to the following address for complete information and
submission rules:
KAUG PD Contest; 1325 N. Meridian APt 201; Wichita, KS 67203

. The following was taken from the March issue of Family
Computing magazine:
"This letter refers to the possibility of your magazine
dropping converage of the ADAM computer. I feel this would be
a serious mistake. I feel that if anything, coverage of the
ADAM should be upgraded because in the past six months, so many
ADAM peripherals have become available.
If dropping ADAM coverage is in Family Computing's plans, I
hope you will reconsider because I really look forward to your
magazine every month.
Guy Culp, Yeadon, PA

Family Computing Editor's Note: The articles regularly
appearing in Family Computing are designed to provide general
information both relevant and beneficial to all computer users.
We're sure ADAM and C128 users, like owners of other computers,
will continue to find valuable, practical information in Family
Computing to help make their machines increasingly useful
computing tools.
Our technical staff continue to develop and adapt original
programs for the ADAM (for example, see the program Weight on
Other Planets on page 52 and the puzzle program in our April
issue). Also, watch for items on the ADAM in the Computing
Clinic and New Hardware departments, and in the Family
Computing Forum on Compuserve (Go FAMFORUM)."
As you can see, it is important to write to Family Computing to
let them know how you feel about coverage of the ADAM. They
respond based on what they hear from their readership. Family
Computing is the only major magazine consistently covering the
ADAM - lets make sure it stays that way. We have given FC a lot
of information about new ADAM products that I think will be

coming out in future issues.

ADAM LIVES !!

PUBLIC DOMAIN WORKSHOP

Due to our large increase in NIAD members and our ever increasing Public Domain library, we will do this workshop each month.

ERRATA
Wayne has found a condition in his UTILCOPY backup copy prog ram that may result in copies taking much longer then usual or not working at all under some very unusual circumstances wi th only certain programs. Please make the following change:
In line 3065 the CALL 27648 statement should be changed to CALL 27645. If you don't feel you can make this change, please send in your Utilities tape UNDVI and $3.00 to cover copying and ret urn mailing and we will do it for   you.
. Basic Volume # BNDV3 contains a program called EASEL, which is a HI RES graphics drawing program. This program is too big for memory. It can be correctd by taking out the lines in the 9000 series that contain the logo screen and the instructions for the keys on the hand controller. The program then runs fine. We modified BNDV3 and made a separate doc file out of these lines.
. Basic Volume # BNDV4 has two music files (MMbachDain and MMjesusBACH) that are intended to be run from the program MusicMaker, also on BNDV4. These two programs will not run. Also, the program Cartcopy has an extra line that should be deleted - line 91. Just load the program, type "91" and hit enter and the line will be deleted. If you want the new version of BNDV4 send in $3.00 and your disk/ tape and we will copy the new version of BNDV4 for you.
. CP/M volume # CNDV4 has a bad block in the MCAT-41 library. You will need to send in your ddp/ or disk to the librarian or me with $3.00 to get the corrected version.

. NEW VOLUMES AVAILABLE:
We now have 15 CP/M volumes and 10 Basic volumes. Send in a SASE to get the updated list of programs.
Here is the program description for Basic Volume # BNDV7, written by Bob Lennes. As you can see ther are some excellent progams here. We should be proud of the high quality of the NIAD PD volumes:

        NIAD PUBLIC DOMAIN
        PROGRAM DESCRIPTIONS #BNDV7
        By Bob Lennes,Librarian

#NEWYEAR- Music and low res graphic display to help
 ring in the new year. Can easily be changed for 1987
#SOLVEXYZ- Solves for a system of 3 equations
#ALARM- Can use this program as a burglar alarm. All
 you need are some electronic sensors which you hook

up to the metal connections inside your joystick. There is a magazine which I cannot recall the name of which has more information on these connections.
#PHONEBOOK- Like a little black book, this program keeps track of names, addresses, and phone numbers. See the readme file 'PHNBK.DOC' for more info.
#CPMADAMFIX- This program will finish the converting job of CPMADAM and remove Control-Z's from a data file that was converted to an 'Adam file'.
#DK+TPEDIT- Allows you to edit the blocks on your tape or disk
#QUADRATIC- Solves the quadratic equation
#WORDSCRAM- Gives all possible letter combinations of a word
#INVENTORY- An inventory program
#NUMFACT- tells you many things about a number- square root, square, tangent, powers, etc.
#TRIGCURVES- graph the different trigonometric curves
#COSTANALYZ- A cost analysis program
#MAGICSQR- An interesting number game (from FAMILY COMPUTING).
#MORTGAGE a program to calculate payments, etc.
#HANGMAN- A low-res graphic version of Hangman
#TEXTCOLOR- Allows you to change screen colors
#DEMOCOLOR- Shows all the different color variations
#ADAMKITE- draws a kite in low-res graphics
#VALENTINE- makes a valentine in low-res graphics
#WEB- Make a web by pushing the controller button
#SHAPEMAKER- an excellent program to make 'DRAW' shapes with
#PIGFEEDER- using DRAW's- you can make the pig fat or skinny by feeding or starving it
#BOOM- draws explosions on the screen
#MULTDRILL- a multiplication drill program
#CALCULATOR- Preforms almost any function that most scientific calculators can
#GRAPH- makes a high resolution graph
#LHOUSE.ASM- A colorful text adventure in which you search a lighthouse and its island. This is a self-documented program. It is also a fast-loading program. You must enter 'BRUN LHOUSE.ASM' to play this game. If you wish to list it, just push CONTROL-C to stop the program and then list it.
#PHNBK.ASM- This is a faster loading version of 'PHONEBOOK'. Type 'BRUN PHNBK.ASM' to run it in Basic.

. The following "documentation" is being sent with all PD purchases in an attempt to alleviate some of the problems the novice ADAM users are having. I'm printing it here to aid allthose of you that already ordered NIAD PD volumes and who may be having trouble with them:

NIAD PUBLIC DOMAIN LIBRARIES

The NIAD PD libraries are collected and maintained for the purpose of benefiting all members by making a large collection of different types of programs available for use. These programs were created by other NIAD members or obtained from Bulletin Board systems throughout the country. NIAD

members volunteer their time to organize and test these programs and create PD volumes by type of software. These programs may contain some flaws, since we do not have time to spend doing rigorous testing on each one. These are not Commercial programs for resale, the price we charge covers the tape or disk they come on and our processing costs only. The purchaser should not expect polished, commercial quality programs although most of the PD programs are very good. The purchaser is getting a large number of programs for close to no cost, which is a real bargain. Please appreciate the time that your co-NIAD members have put in to supply you with these programs.

DOCUMENTATION

Every effort is made to provide adequate documentation for the PD programs. However, documentation is judged by the reader and what I consider as good may be inadequate to someone who is a beginner. Hence, the writers of the programs that are in the PD library may not supply what everyone considers as "adequate" documentation.

All documentation assumes that the purchaser has read the manuals that came with the ADAM and understands the basics of loading and running programs using whatever specific software product is involved (SMARTBasic, CPM 2.2, ADAMCALC, LOGO) - YOU MUST READ YOUR MANUALS or you can't expect any program to work properly for you.

Most of the PD volumes have documentation files on them. These files have names such as "README" or contain the word "DOC" in them. Print and read these files before attempting to run the programs referenced.

GENERAL INFO: The disk/ddp you receive from NIAD should be your backup - your first job should be to make another copy of the tape/disk that will be your working copy. You can do this by using a copy utility or just moving the individual files one by one to another tape or disk (this can be done from Basic for all but the CPM 2.2 programs - just do a load of the file from the NIAD tape/ disk and save it back to another tape/ disk). Your second job is to read the DOC or README files on the tape. The following documentation refer to the PD volumes indicated:

SMARTBASIC VOLUMES #BNDV
These volumes contain programs written in SMARTBasic. You must first load SMARTBasic and then run the programs you desire. You should use SMARTWriter to print any README or DOC files first, of course - just use the STORE/GET key to access the directory for the PD tape and select the documentation file to load it into SMARTWriter and then read/print it.

UTILITIES VOLUMES #UNDV
These volumes also contain programs written in SMARTBasic and must be run after loading the SMARTBasic tape - read the documentation files first via SMARTWriter !

LOGO VOLUMES #LNDV
These are LOGO programs that are loaded and run after you load your SMARTLOGO program (#7600 purchased separately).

ADAMCALC VOLUMES #ANDV
These are "model" spreadsheets, with preprogrammed row and column data that you load after you load the ADAMCALC program (#7831 purchased separately).

CPM 2.2 VOLUMES #CNDV
NOTE: CPM 2.2 IS A MORE TECHNICAL OPERATING SYSTEM AND NOT RECOMMENDED FOR COMPUTER NOVICES UNLESS YOU HAVE THOROUGHLY READ THE CPM 2.2 MANUAL AND UNDERSTAND HOW TO RUN, COPY AND MOVE FILES.
These are programs written to run from the ADAM CPM 2.2 & ASSEMBLER program (#7832 purchased separately). DOC files must be printed using the "TYPE" command - see your CPM 2.2 manual. Note that some of the files may be "squeezed" (reduces the space they occupy on a disk/ddp) and must be "unsqueezed" before you run them by using the "USQ" program on volume #CNDV1 or the "USQ120" program on volume #CNDV3. Squeezed files contain a "Q" in the middle position of the last three digits of the filename (eg MODEM.AQM). To unsqueeze a file move it to another disk/ddp along witht the USQ program and enter "USQ MODEM.AQM" - the file will be unsqueezed and you can go from there.
Other files may contain "LBR" as the last 3 digits of the file name - these "library" files contain a number of different programs that have been mashed toghether into one file. You must move them to a blank disk/ddp and use the "DELIB" or "LU300" programs to separate the various programs contained in them.
Only CPM 2.2 files with a "COM" in the last 3 positions of the filename can be run from CPM - to run these files just enter the file name (leaving off the COM).
Please read the CPM 2.2 WORKSHOP in the July, August, September NIAD issues for more basic CPM info.

USING NIAD SmartBASIC PUBLIC DOMAIN PROGRAMS
 A Guide to Help You Figure Out Problems
 By Bob Lennes
It is very easy to use the programs from the public domain library. All you have to do is load SmartBasic and load the program and start using (or playing) it. I will explain some of the problems that some of you   have or will encounter in using these programs.

Before trying to use each program, you should do the following:

1) Go to the word processor mode and either print out or read the file titled README or READMEDOC. These files contain descriptions of every program in each volume. (There are no README files for volumes 1,2, and 3, but it would be a good idea to print out the directory from Basic.)
2) Check to see if the program has a DOC file. The DOC file has instructions for the program and should be read from word processor mode.(i.e. The program CALENDAR on #BNDV3 has a DOC file called CALNDR DOC)
3) Only programs that have an 'A' in front of them can be loaded and run. Also, files that aren't

listed in the Program Descriptions probably can't
be loaded because they aren't programs.
4) See the table below for error messages and their
possible causes.
5) To get out of a program, push CONTROL and C at
the same time and then push return.

ERROR	PROBABLE CAUSE	REMEDY
Out of Memory	A previous program probably set LOMEM too high	Type 'LOMEM:27407'
File Type Mismatch	You tried to load an 'H'-type file	The file maybe a DOC,data, or fast-loading file(ASM)
Nothing happens when you load prog.	The program is a DOC or data file (i.e. PaintNIAD)	Same as above Use word processor
I/O Error	Tape/disk not in properly	Insert disk/DDP and try again

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For all other errors, consult your SmartBASIC book.
As much as I try to make sure these programs are bug-
these programs are bug free, occasionally one slips by. If your
program fails to work after doing all of the above, please feel
free to write to me.

NEW ADAM OWNERS WORKSHOP

The purpose of this column is to help new ADAM owners get
started and effectively use their system.
Obviously, some of you new ADAM owners may be computer experts
in that you may have had other systems and only need
acclimation to the specifics of the ADAM. The rest of you may
have purchased the ADAM as their first computer system.
The first thing to stress is READ the instructions and manuals
supplied with your ADAM. Many questions I have answered could
have been solved through reading the Coleco manuals. Now, I
know that this is tough for the impetuous among us (I am one of
these types), but it necessary if you want to effectively use
your system. I do recommend a training course that will help
you get started with your ADAM called the Learning Express.
This audio course was reviewed in NIAD issue # 10 and is a
great way to get started, especially if you are a new computer
owner. The audio tape and manual does a nice job of stepping
the novice through setting up the computer, and using both
SMARTWriter and SMARTBasic. Depending on what you plan to use
your ADAM for will determine what education you need. If you
just plan to use the wordprocessing program (SMARTWriter) then
a combination of the book supplied with ADAM and one called

The Second Book of ADAM: Using SMARTWriter. Both of
these items are available through the Buying Service.
For you potential Basic programmers, you need to plan on
spending some time to learn the Basic programming language.
There are alot of Basic programming books around and two that
are good for the beginner are: The Coleco ADAM User's
Handbook and The First Book of ADAM. NIAD carries both
of these books. Now if you want to get into other languages
such as LOGO or use programs such as ADAMCalc or SMARTFiler you
will have to study the manuals that come with these programs.
I would suggest you get the back issues of NIAD to read the
reviews and workshops on some of these programs.
CPM is a whole other world and I would suggest you get
acquainted with the ADAM for awhile before you tackle CPM. See
the CPM WORKSHOPS in the various issues for information on this
operating system and associated programs.

There are some basics you need to get started.
1. The first is a "backup copy " utility that will allow you to
create a second copy of important programs such as your
SMARTBasic tape and other key programs. This is a commandment
to insure that you have an extra copy of these key programs in
case your original is lost or damaged. If you do not have one
of these programs (there are a bunch on the market) you should
order the NIAD Public Domain Volume UITILITY # UNDV1 which
contains a program called UTILICOPY which will make back up
copies of all your data packs and disks except for the
SUPERgames.
2. Repair for your ADAM (except for the Disk Drive) can be
obtained at a Honeywell Service center located near you - call
information or the Coleco toll free "Hotline" for the phone
number.
3. Read the Product Review Summary you received and determine
which products you are interested in and then read the detailed
review in the back issue indicated for more information if
required - don't buy indiscriminately just because a title
sounds good because you may be disappointed and frustrated.
4. Order basic supplies of ribbons and extra data packs/
diskettes so you don't run out when you're in the middle of a
hot project.

BEGINNER'S BASIC WORKSHOP
By W. MOTEL

This month we'll talk about program and catalog listing and some ways to control it.

To get a catalog listing
CATALOG <optional Dn>
i.e. CATALOG catalog from last drive used -ddp/disk CATALOG D1
catalog from tape drive 1
CATALOG D5 catalog from disk drive 1

If you do not have a tape/disk in the requested drive, the system seems to lock up. Simply put a tape/disk in the drive and the catalog command is processed. Listed on the screen is the catalog listing showing the contents (files) on the tape/disk.

To get a program listing,
LIST <optional start line #,opt. end line #>
This displays, on the screen, the current program in memory (or portion of that program).
i.e. LIST lists all lines
    LIST 10   lists line 10 only
    LIST 10,100   lists line 10 thru 100
    LIST 10,   lists line 10 thru last line
    LIST ,100   lists first line thru line 100

As we said, these normally go to the T.V. screen. The speed at which they are displayed is normally very fast. Long lists/catalogs scroll off the top of the screen before we can read them. Let's take a look at how we can handle these situations.

CHANGING Screen to Printer
PR#1 directs all future output to ALSO go to the ADAM printer. Output can be from list, catalog, or normal print.
PR#0 Shuts printer output off. Output only goes to screen.
These commands can be either part of a BASIC program or typed in directly. Once you pr#1, the printer is on (output goes there) until you PR#0. One other thing does it. If in the middle of printer output, you do a Control/C, this will interupt the listing AND discontinue output to printer (as if you did PR#0). To restart, redo PR#1. It is normal to here the print carriage go back to the left when you do PR#1.   EXAMPLE
    PR#1 :   set on printer output
    CATALOG: catalog list from current drive
              output to screen AND printer
    PR#0 :   shut off printer output
If you already have text output on the screen and wish to print it, hit CONTROL/P (hold control key and the P or p). This will print all text information currently on the screen. It WILL NOT print HI-res, LO-res graphics or INVERSE text information.

Suppose you simply wish to slowww down the display (screen) speed at which the information is listed. The SPEED=n command will do this. Again, either make it part of a BASIC program or type it in directly. This controls screen display speed, NOT printer speed.

i.e. SPEED=255   fastest speed
     SPEED=0   slowest speed
     SPEED=any value 0-255
Once set, the speed stays set until you change it.
 SAMPLE PROGRAM
10 HOME:PRINT " ENTER SPEED 0 - 255"
20 PRINT " or other value to end"
30 INPUT " SPEED ";S
40 IF S < 0 OR S > 255 THEN SPEED=255:END
50 SPEED=S
60 PRINT " This is a sample"
70 PRINT " of SPEED ";S
80 PRINT " try a different value to judge"
90 GOTO 10
Run it to see the relative speeds. Just type in a numerical speed value of 0 to 255. To END, enter a numeric value other than 0 - 255 (ie 256).

The last thing we want to control is stop screen scrolling. Actually, what we want to do is PAUSE the display (not interupt it as with Control/C). To do this, we do a Control/S (hold control key and S or s) to pause the output. To continue, hit any key (or just hit return). The output (screen or printed) will restart where it left off. Try it when running the sample program.
I hope this helps some of our new computer users out or makes the reference manual information on this a little clearer.

UTILITIES WORKSHOP

UTILCOPY Update by W. MOTEL

One of our members, Glenn Previtt, called the other day asking if there is some way he could correct the "blocks remaining" when using UTILCOPY to copy a tape to disk, since the disk copy has the original tape calculated space on it. This is based on the tapes 256 blocks, not 160 as on disk. I have included the patch to include in UTILCOPY. What is does is
1. After we've read the 1st 16 blocks and the output is to disk, you are prompted "DO YOU NEED DISK FIX", if yes
2. Searches memory (containing block 1 directory entries) for the entry BLOCK (as in BLOCKS LEFT). When found
3. Resets the 18th position (allocated blocks - which tells whats left) to 160 - (the 14th position value BEG BLOCK #)
4. The COPY continues as normal and you now have a corrected disk copy.
This works, as long as, the output is to disk, whether the source is tape or disk. You can, therefore, correct an existing disk copy, as follows
1. Run UTILCOPY - source/dest is disk
2. Source is the original disk
3. After the 16 blocks read in, DO DISK FIX
4. DESTINATION (for write) is same disk. This will recopy blocks 0 - 15 (with the block 1 directory fixed)
5. On insert SOURCE (for next 16 blocks)--do escape for interrupt
6. You have now corrected the directory
Remember, you only do the DISK FIX when doing a copy of a directory, not a SUPERGAME, which doesn't. In essence, if you

can do a CATALOG command on a disk, you can fix the blocks
remaining.

```
3075IF x=0 AND vd%<6 THEN GOSUB 3200
3200REM    FIX DISK BLOCKS LEFT
3210VTAB 19:HTAB 3:INVERSE:? "DO YOU NEED DISK FIX "; :NORMAL
3220GOSUB 1550:IF kp%=0 THEN 3220
3230IF kf$="Y" OR kf$="y" THEN 3250
3240GOTO 3290
3250FOR df=(29024+78) TO 30048 STEP 26
3260IF CHR$(PEEK(df))<>"B" THEN 3280
3270IF CHR$(PEEK(df+1))="L" AND CHR$(PEEK(df+2))="O" AND
CHR$(PEEK(df+3))="C" AND CHR$(PEEK(df+4))="K" THEN GOSUB 3300
3280NEXT df
3290RETURN
3300REM    SET BLOCKS LEFT for disk
3310IF PEEK(df+13)>159 THEN POKE (df+17), 0:GOTO 3330
3320POKE df+17, 160-PEEK(df+13)
3330VTAB 19:HTAB 3:? " BLOCKS LEFT set to "; PEEK(df+17);
3340 df=30023:RETURN
```

SMARTBASIC WORKSHOP

THE ADAM PERSONAL PHONEBOOK PROGRAM
By Bob Lennes

Now that all you hackers out there have gotten a chance to
fool around with the PHONEBOOK program I gave you in the last
issue (that is, if you were able to type it all in), I will
explain the subroutines used within the program itself. Many of
the subroutines in this program can easily be use d in other
programs, especially the machine language that is used.
Remember, if you don't feel like typing it in, you can get it
on P.D. Library #BNDV7.

MACHINE LANGUAGE SUBROUTINES

There are only four ML routines that I used in this
program, but they are very useful.
. Line 55 loads the routine that makes the beep when you push
the wrong key.
. Line 65 loads the routine that checks for the disk and tape
drives that are hooked up to ADAM. If the drive is hooked up,
It loads a zero into the following locations for each drive:
27995=disk 1, 27996=disk 2, 27997=tape 1, 27998=tape 2
This routine is used for the 'select device' gosub routine at
line 2200.
. Line 75 loads the routine that prints lines from memory. This
routine is faster than PRINT statements, so I used for the
Delete routine at 6000. To use it all you have to do is poke
27801 and 27802 with the low and high bytes of an address. This
address holds the value of the length of the line and the
actual line to print follows it.
. Line 85 loads the routine that performs a file search. This
routine is used for the Save File routine at 9500. It checks to
see if the filename you are using already exists. This routine
can be very useful for other programs. Its use is shown in line
9950.

Record Arrangement
This program uses BSAVE's and BLOAD's instead of using
SmartBasic's bugged file methods. The method I use is much
quicker than SmartBasic. Each set of records are contained in
memory in Random Access format; that is, each field of each
record is a certain length, independent of how much data each
contains (longer names use the same amount of space as short
names). Each record in memory takes up 80 bytes. Here is how I
have each field set up:

00	Attribute (99=Record present)
01	File Letter
02-25	Name
26-46	Address (street)
47-61	City
62-63	State
64-68	Zip Code
69-79	Phone Number

Saving The File Directory (PH#FLS)
A file is saved from memory called PH#FLS each time you
save a file of phone numbers. It resides at memory location
27410, and contains a directory of all current phone files on
the current disk or tape. It is arranged as follows: byte
27410=number of files, and each set of 10 bytes thereafter
contains a file name. The reason there is a limit of 15 files
on each disk is because the machine language routines start at
27600, so there isn't very much room left for the
filenames. See lines 9600-9700 to see how the files are
actually saved and added to the directory.
You may have noticed the strange way the files are
B'saved.(EG."BSAVE !,A28000,L";) This is because of a flaw in
SmartBASIC 1.0. (Yes, I found another one!)   When using a
statement with Print CHR$(4), there is a limit on the number
of characters you can use after the CHR$(4), which is too small
of a limit for using   commands such as BSAVE, or using more
than a couple of attributes. By the way, be sure that your disk
or tape doesn't have any files named PH#FLS, pp!, or !, or else
the program will mess up.

OTHER ROUTINES:
A couple of the routines in this program were taken from
the program Utilcopy (see issue #5, May,1985) such as the
function key menus (lines 1500-1589).
A very useful routine I added in this program is the line input
routine at line 9000. At inputs a line of certain length. It
is used mostly for the field input when adding entries.
Another routine is a file check. Adam checks the disk or tape
directory to make sure the file doesn't already exist. If it
does, and it is a phone file, you have the option to delete it.
(See lines 9950-)
I also have a routine similar to Menu Select to select a file
to load or delete. See lines 2000-.
Also, in lines 8115, 8140, and 8150 I used a Poke that you have
not seen before. Address 16135 is the value of the key that
performs the CONTROL-S (freeze screen) function. Its default is
19, which is the value for Control+S keys. I set it for 133,
which is the [V] function key.

A FINAL NOTE:
 If anyone makes any good enhancements to this program,
please be sure to tell us about them so that we can share them
with your fellow programmers.
 If anyone has any suggestions for future programs or articles
for the SmartBasic workshop, please feel free to drop me a line.

APPLE TO ADAM PROGRAM CONVERSIONS
by Bob Lennes

Have you ever looked at a Apple program that you wanted to type
into your Adam and have the program either mess up or not work at
all?
This is because Apple Basic is not TOTALLY compatible with
Smart BASIC. There are a few minor changes you must make to your
SmartBasic programs first, and some changes,such as pokes, if not
made could 'freeze up' Adam, causing you to have to reset Adam and
start all over again. Here are some of the changes you need to make:

APPLE	ADAM
CALL -868 (clear line)	HTAB 1:?:VTAB VPOS(0)
CALL -198 (bell)	? CHR$(7);
PEEK(36) (cursor pos)	POS(1) or PEEK(17002)
POKE 36, x (cursor move)	HTAB x
PEEK(37) (vert csr pos)	VPOS(1) or PEEK(17001)
POKE 37, x (cursor move)	VTAB x
PEEK(-16384) (keyboard)	PEEK(64885)
POKE -16368, character #	POKE 16150,255: POKE
(load keyboard buffer)	64885, character
Hand controller inputs	See PDL(x)
PEEK(-16336), PEEK(-16352)	Cassette & speaker, ignore
PEEK(216)	not applicable
POKE 216,0	CLRERR
PEEK(222)	ERRNUM(1)
PEEK(219)*256+PEEK(218)	PEEK(16127)*256+
(line number with error)	PEEK(16126)
POKE 232,LS: POKE 233,HS	POKE 16766,LS: POKE
(shape table address)	16767,HS
CALL -3288	RESUME

Be sure not to use any other unknown POKES or CALLS from an
Apple program; they might cause SmartBASIC to crash.
There are a few other minor modifications you should make to
Apple programs:

1. ADAM's SmartBASIC screen is 31 characters long, compared to
Apple's 40 characters. Adjust text lines accordingly.
2. SmartBASIC's HGR screen is 255 points wide, compared to
Apple's screen 291 points wide. To convert Apple's x
coordinates to ADAM, multiply by 255/291.
3. Do not delete an open data file, close it first.

4. The maximum line length for SmartBASIC is 128
characters while Apple's maximum line length is 255
characters. You can change this by either making the lines
shorter, or POKING a higher value into address 12185. Do not   poke
a value higher than 240 into this address, or SmartBASIC   will
crash.

SmartBEST WORKSHOP
INTELBEST

MODULE 1.1
THE SOUND COMMANDS:
COMMENTS:
This is the first in a series of workshops for programmers who
use SmartBEST by DATA DOCTOR. Although the 25-page instruction
manual is written in an easy-to-understand fashion, it only
presents limited demonstrations. Actual experimentation is
left to the user's descretion. Hopefully, this workshop will
answer any questions that you have about the package.
NOVICE USAGE :
Standard SmartBASIC provides no access to the sound chip
other than the bell,ie, PRINT chr$(7). SmartBEST adds 9 actual
sound commands to the language (VOICE1, VOICE2, VOICE3, NOISE,
V1off, V2off, V3off, OFF, and HUSH).
ADAM uses a Texas Instruments sound chip, the SN76489A. The
chip supports three independent voices (4 octaves each) and a
noise generator. Without SmartBEST a machine language routine
must be used by the programmer to generate sound from this
chip.
The BEST commands make access easy. To turn on the first
voice all you need to do is enter: VOICE1 <RETURN>. To turn it
off just enter: V1off <RETURN>. By the way, all BEST commands
may be entered in upper or lower case and used with or without
program line numbers.
Each voice supports 64 possible tones (actually many more, but
this will be explained in a later issue). The tone for the
first voice is pre-set (default) to 16. To change tones all
you do is POKE the new value (0 to 63) into the address
corresponding to the voice number. For instance, to change the
tone for the first (#1) voice: POKE 1, (new tone value); to
change the tone for the second (#2) voice: POKE 2, (new tone
value); and so on.
Try this in immediate mode, ie, without program line
numbers:
POKE 1, 10: VOICE1 <RETURN>
POKE 1, 18: VOICE1 <RETURN>
POKE 1, 33: VOICE1 <RETURN>
V1off <RETURN>
The value that you POKE into the addresses (1, 2, or 3) may be
any number 0 to 63. Experiment with the voice commands and
you'll see how easy it is. More on the VOICE commands in the
next issue.

INTERMEDIATE/ADVANCED USAGE:

All of you ADAM programmers who have progressed beyond the
novice level have done so primarily through your own personal
initiative. Because of this self-motivation, you tend to learn

quickly and experiment freely. This section is intended to
give you some guidelines to work with. In later issues, we'll
explain how the new commands work internally and how to create
your own new commands. Here's a simple program that let's you
experiment with the various tone values:

```
10LOMEM :27600:POKE 17115, 252:TEXT
20CLEAR:POKE 16129, 255:POKE 16953, 0:HUSH: tv%=0
30VTAB 2:? " <ESCAPE> = END PROGRAM"
40VTAB 4:? " UP ARROW = INCREMENT TONE"
50VTAB 6:? " DOWN ARROW = DECREMENT TONE"
60VTAB 8:? " <HOME> = PLAY CURRENT TONE"
70VTAB 14:? " CURRENT TONE VALUE:"
80VTAB 14:HTAB 22:? tv%
90VTAB 23:HTAB 1:GET key$: ke%=ASC(key$)
100IF ke%<>160 GOTO 130
110 tv%=tv%+1:IF tv%>63 THEN  tv%=0
120GOTO 80
130IF ke%<>162 GOTO 160
140 tv%=tv%-1:IF tv%<0 THEN  tv%=63
150GOTO 80
160IF ke%=27 THEN TEXT:POKE 16953, 95:? " terminated":END
170IF ke%=128 GOTO 200
180POKE 27469, 24:CALL 27468:FOR delay=1 TO 150:NEXT
190POKE 27469, 252:CALL 27468:GOTO 80
200POKE 1, tv%:VOICE1:FOR duration=1 TO 250:NEXT:V1off:GOTO 80
```

CP/M 2.2 WORKSHOP

NIAD CP/M PUBLIC DOMAIN By C. Kolander

This month we are covering PD Disk #8, which contains a C
compiler and libraries of functions.
The C programing language is rapidly becoming one of the
most popular languages around. There are alot of reasons for
this such as availability, portability and it is easy to
learn. The version on the pd disk is a subset of C, called
Small C. This is the 2nd revision and the newest. All the
files needed to start programing in C are included in the
CV2COR.LBR. All of the other libraries contain various
function that can be "included" into your programs at copile
time. Some of the functions were written for different
compilers, so may need some minor changes made to work with
this compiler, but most don't. There is a complete User's
manual included in the library, and some documention in the
various libraries on the functions, one's that don't will
have to be listed out, in order to understand them. Because
it's beyond the scope of this column to teach programing, I
can't say much else about the programs contained on this
disk, but I would like to recommend some books for those who
would like to use this disk and learn C, I also would like go
through using the compiler to compile the example program found
in the CV2RST.LBR. First the books,
C Primer Plusby Waite,Prata and Martain   Sams Books
The C Primer Byte Books .
C Programing Languageby Kernighan and Richie Prentice-Hall

Before trying to use the compiler, read the manual included in
the library. There are a few things that the manual
doesn't tell you and there are a couple of things included
with the library that won't work with the ADAM. When I tryed to
compile the example program (IOEXAMPL.C) using the submit file
provided, the computer hung up and gave me a Unknown Drive
error. When I tried to work around it by skipping the submit
file, I found out that the manual assumes that you have
delibraried all the function found in CV2EXM.LBR to your disk,
because the program started asking for files that I didn't have
on the disk. So, here is how I use this compiler on my Adam (I
use 2 drives), if you find other, better ways please send them
in so we can share them with everyone. First off you will need
to delibrary CV2COR.LBR to a seperate disk. Then PIP the
following files to a seperate disk:
CV2.COM
CV2CALL.C
CV2LIB.C
STDIO.H
The manual asks you to put Asm, Xsub and load on the same
disk, I would keep them on a seperate disk as you will need
pretty much all the space on the disk for functions that are
called upon by the program being compiled, and like I said
earlier, forget the the submit files in the library. Next
put as many of the functions (as well as the example program
IOEXAMPL.C found in CV2RST.LBR) you can fit on the disk from
CV2EXM.LBR. The function needed to compile the example
program are as follows:
fprintf.c fscanf.c iswhite.c utoisz.c   dtoisz.c xtoisz.c
printf.c utoi.c   itod.c   itox.c   itou.c

Place the disk you just made in drive A: and a blank
formated disk in B:. Run the compiler by typing CV2, then
answer the questions as follows:
Output file: B:IOEXAMPL.ASM
           ! Don't forget your using the disk in B: for
your output!!!
Monitor Headers: Y
Sound Alarm: Y
Pause: Y
Optimize size: N
Listing: <RET>
Input file: IOEXAMPL.C
After a while the program will ask again:
Input file: CV2CALL.C
Input file: CV2LIB.C
Input file: <RET>
Use just a carriage return to tell it that you are finished.
Then take and insert your disk with your assembler and
loader on it, assemble the file and load it. Your all done.
Most of the above is found in the manual but I wanted to
show that you will have to use 2 drives and that your output
file has to placed on a seperate disk. The reasons for this
are :

1). You will need most of the function found in CV2EXM.LBR to
compile a program, unless you want to look at it first and see
which ones you need and place them on your your work disk each
time you go to compile a program.

2). The Asm file produced from the compiler are pretty
large, the Asm file from the example program when finished
ended up to be 66k. The hex file after assembly was a
whopping 30k, and when finally loaded the command file ended up
to be 12k.

If you are using an Adam that has only data drives, I would
forget about using this set of programs as it would take
forever to compile on them. With the use of 2 disk drives it
took be a 1/2 hour to compile the example to a command file. I
hope this helps those who which to use this C compiler,
other than the need for 2 drives this program is excellent
and better yet it's free.

Next month we will be covering PD Disk #9, which contains
mostly utilities.
NOTE: PD Disk #8 and a few of the others contain some
libraries that don't have any CRC codes (found on the far
right, off the screen), not to worry, they were made with a
library utility that doesn't use CRC checking and will not
affect the programs within.

Eve SP-1 and External Modems By C Kolander

A lot of people seem to be getting external modems for there
ADAMs, and most want to know how to get there CP/M modem
programs to work with them. There are 2 ways to go about
this, either patch your present program with the new port
information or insert the new port numbers into the overlay
for your program and reassemble it.
If you choose to do the latter, remember to also place the
information in that makes your modem dial ect. Here are the
port assignments:
44h -- Serial Data Port
45h -- Serial Status Port
46h -- Serial Mode Port
47h -- Serial Command Port

For those who have either dumb modems or don't need to run
your dialer, ect. from software you can patch your current
modem program with the following using DDT:
S12B
012B 5F 45
012C C9 . S135
0135 5E 44
0136 C9 .
S13F
013F 5E 44
0140 C9 .
S15B
015B 5F 45
015C C9 .
S15E
015E 5F 45
015F C9 .
G0 (G ZERO)
Then just do a save, for Madam7 you would SAVE 73
MADAM7.COM.

The patch method will only work as shown on the CP/M public
domain programs like Mex or Modem7. Remember no matter how
you do it that you have to run Serial.Com first and set up
your Baud rate. Any questions just let me know.
Next month I will be writing a little artical on how one
uses and installs overlays.

SMARTWRITER TIPS WORKSHOP
By D. Zimmerman

 PAGE vrs SCREEN: The "screen" is what you can actually
see without using the up or down arrows to bring new lines of
text into view. The "screen" also includes the part that is off
to the right that you can not actually see. Dont mix up the
"screen" with the "page". The page consists of the number of
rows that would be printed out on a piece of paper. The
vertical length of a "page" is shown on ADAMs screen as the two
double red markers that appear on the left hand side of the
screen. These red markers are where your text will be printed
on the paper and can be changed with the vertical margins
settings. If you use the default vertical margin settings (6
and 60) one "page" will consist of almost three vertical
"screens". If you lengthen the vertical "page" it will contain
more lines. ADAM only displays 20 lines on a "screen" because
it uses four lines for the SmartKeys.

   HOME AND ARROW KEYS
Although most ADAM owners know this newcomers may not unless
they purchase the excellent RIB TAPES by TapeWare. The RIB
tapes are still one of the best investments a newcomer will
find if they truly want to become familiar with the workings of
ADAM. (EDITOR's NOTE: Tapeware Technology who developed the
ROB I & II tapes no longer are making them) The RIB Tapes
demonstrate how to use the HOME and ARROW keys together to
"fly" through text instead of the snails' pace any of the arrow
keys provide alone. The actions of the keys are:

HOME - One press of HOME will fly the cursor to the
upper left hand corner of the screen. This is true even if the
screen window is out to the right hand side of the text. The
one exception to this is when the cursor is located any
where in the first line at the top of the screen. The
cursor will file to the upper left hand side of the
screen but it will also scroll up one screen of text at
the same time. Each subsequent press of the HOME key will
scroll up nineteen lines in the text. ADAM screen shows 20
lines of text with four lines used to display the Smart Keys.
"SPEED" KEYS - HOME key with one of the ARROW keys.
ONE plus UP ARROW - Does almost exactly the same as the HOME
key alone except it keeps the cursor in its present   column.
HOME plus DOWN ARROW - Does just the opposite of the HOME/UP
ARROW combination. The first press will "fly" the cursor to the
bottom of the present screen and each subsequent press will
scroll down 19 of the 20 lines presently showing on the
screen. Coleco only scrolled 19 lines to leave the last line
read still on the screen but now it the first line at the top
of the screen. This is very   useful in helping the
user read through the text.

HOME plus RIGHT ARROW - Zips the cursor to the right hand edge of the present screen. A subsequent press will zip the cursor and the "window" 32 spaces to the right to bring more of the page into view. NOTE: Use of the right arrow with of without the home key is the only way to move the cursor WITHOUT adding spaces (ASCII #32 characters) to the text. The TAB and space bar both "writes" spaces in the text. The use of this "speed" key combination also allows you to zip past any hard carriage returns out to the right hand margin setting. By zipping the cursor out to the right hand margin and BACKSPACEing back to thetext will insure the removal of any blank unseen spaces. HOME plus left ARROW - Does the opposite of the HOME/left ARROW.

HI-LITING: HI-LITING can be done very fast by turning on the HI-LITE and using the "speed" key combination to HI-LITE the text. With the cursor in the first column the use of the up and down "speed" keys will HI-LITE the entire width of the page and not just the screen that we see. Just be careful and re-HI-LITE the entire bottom line if you are using the "Speed" keys to HI-LITE text. Using the "speed" keys to HI-LITE will only HI-LITE the first column of the bottom line of the screen. This is true in both the up and down direction. If you want the entire bottom line HI-LITED you must move the cursor from the second column of the bottom line out to the right hand side of the page. This can be done either with the right arrow or the right "speed" keys. Otherwise only the first character of the bottom line will be HI-LITed and acted upon. If only ten or so lines are wanted to be acted upon as HI-LITEd text and not the entire screen, scroll the first line you want to be acted upon to the top of the screen, "speed" the cursor to the last line you want acted upon, turn LI-LITE on, hit the up "speed" keys to HI-LITE the wanted text, and hit the Smart key sequence. Be sure to check the bottom line for the first character HI-LITE "bug".

REVIEWS

TAX1040-85
Extended Software Company
Review W. Motel

This is a BASIC program that calculates your 1985 taxes. Besides the FORM 1040 and 1040 schedule A, it also works with a few other supporting shedules. The program is well organized to allow you to not only pick out the form-schedule you want to work with, but you can pick out the sections on that form that you want to work with.

When working with a form, you enter the line number within the form-section you want and the program prompts you for the amount. If the line number is invalid for the form-section, it will let you know. If the line is the results of a calculation, it will show you the amount and not let you enter over it.

Depending on what form-section you are currently on, certain current values are displayed, IE adjusted gross income, TAX, etc. As you enter detail line info, the current values are changed and you instantly know the effect.

You can use this to see what effects different information has on the final tax. The actual tax is calculated via a formula (it isn't possible to possibly store all the tax tables), but you are told to verify it against the actual tables and you can override it.

In using it with my actual return, the calculated tax was only $3 different (a very small percentage).

You can save/load your work on tape or disk. You can display or print. You can clear the values. These 5 functions are smartkey driven. As you work thru the forms, you see the actual description for each line, but the display and print only show the line number and amount.

This is NOT for producing the actual forms, but only as an aid in preparing. A sample blank of each form used by the program is included for reference.

Overall, it basically does what it's intended for, however, I noticed some problems.
1. Certain lines with part a, b, c, etc. show up in detail when entering, but on display or print, it show as one line with $0.

I.E. Medical 2a,2b,2c deductions print as line 2 $0 even though we enter values into the 3 places and the amounts are properly totaled in final totals #2
2#. The only addition problem I found, is the above Medical line 2a, 2b, 2c deductions. 2c (other) does not get added into the line 3 total (just 2a and 2b)
3. When you enter amounts over .50, they get rounded to the next dollar, yet, less than .50 keep the cents. As I understand the instructions on 1040, you can round up/down, BUT YOU MUST ALWAYS DO IT.
4. Some of the displayed << enter prompts >> cause screen wraparound and clearing out of the next screen line (description for the next screen prompt). This doesn't cause problems in data entry, but you lose the display of what you are to enter.

I have mixed emotions on this one. They have tried to do a good job. The above few problems are not, what I think, difficult problems to find in testing. The screen wraparound is certainly clearly visible and does detract from the display. The addition problem is ,of course, probably the worst. The parts (a,b,c) showing on the display/print lumped together as $0 make that useless in transfering the data to the actual form. You can get around this, providing you know thses problems exist, but a software package should not expect the user to resort to this.
RATING - B-

PaintMaster
by STRATEGIC SOFTWARE
Review: W. MOTEL

This is a hi-res graphics creation program. It allows you to 'paint' pictures on the screen and save/load those pictures. Big Deal! We've seen these before. You may even have written your won. Well, that may be true, but you have'nt seen anything for the ADAM this sophisticated. This is one of the finest, polished software packages from any company (for the ADAM) including COLECO. They've patterned this after MacPAINT (for the Macintosh) and have done an excellent job.

Your options are selected from graphic ICONS (or picture

symbols) that are displayed on the left side of the screen. You can change both brush and backround colors. You can also control line thickness. You can select from 20 brush stroke designs and change the distance between strokes. ICON options include disk for save/load or quit (you can save/load to tape or disk), drawing of uniform shape circles, 4 sided polygons, triangles, or straight lines. The shapes can be hollow or filled in. When doing this, a triangle for example, you simply plot the 3 corners and it does the rest. Circles ask for a center point and outer edge point. You can, of course, also do free form with the brush. Text can be inserted into the worksheet (picture area). You can even move or copy up to half the screen to another part of the screen. What's amazing is it does all of this relatively quickly.

Included are 4 samples, a graph, an auto, a rocketship, and the StarTrek Enterprise.

As options are selected, for example the disk, a message area at the bottom of the screen shows the options, (I.E. SAVE LOAD CONT). You point to the desired option with the arrow and hit the fire button. Everything is controlled via the controller. The joystick moves the onscreen pointer/brush/etc similiar to using a mouse controller. Only text or filenames are keyboard entered.

The instruction manual is very well done and is very concise. Only 1 problem exists and THEY POINT IT OUT.The video chip weakness is color bleeding. In hi-res you can only have 1 color assigned to each 8 pixel zone (going left to right only). I.E., horizontal postions (columns) 0-7 can only be one color, 8-15 one color, etc. Column 7 can be red and column 8 green because they are in different zones, but plot a yellow line in column 11 and the green in column 8 will change to yellow (11 is in same zone as 8). THIS IS NOT A PROGRAM PROBLEM. you can learn to work around it.

Overall this is a highly recommended package. They have done an admirable job. They have obviously spent time in developing this and should be supported for their effort and support of the ADAM.
EDITOR's NOTE: Strategic now provides a print program with the newer versions of Paintmaster. It will print out a representation of the picture saved, assigning different characters for each color used. It is obviously very slow, but a nice addition. All PaintMaster sold by NIAD will have this added program.

RATING: A++

TURBOLOAD
by STRATEGIC SOFTWARE
Review: W. MOTEL

This is a quick load convertor for your BASIC programs. You load your BASIC program, brun TURBOLOAD, and upon return of the BSAVE command on the screen (from turboload), you fill in the program name and hit return. The binary version of your program is now saved to the desired tape/disk drive.

To run your quick load version, simply brun it. In a test using my 23 block UTILDUMP program, the turboload version loaded from disk in 10 - 11 seconds (normal load time is 90 secs.

Also included is FILE ORGANIZER and FILE INDEX. File organizer allows you to change volume headings, lock, unlock, delete, undelete (recover), or rename one or more files on ddp or disk. You can also load or run from FILE ORGANIZER. Using smartkeys, a ddp/disk directory is read and displayed on the screen. You can now do any of the above functions on one or more of the files. This is done by "marking" the files you want. When done marking, the action is performed for the marked files. This eliminates the need to do one file at a time. Since many of the functions actually update the volume directory, this means that only 1 write need be done to the directory, not 1 for each change. Volume name change lets you change the volume name to something more descriptive without having to Re-init and lose the actual data on the ddp/disk.

FILE INDEX allows you to create a list of files on any combination of ddp/disk. Only limit is a maximum of 1000 file names. The filenames are sorted alphabetically and the list printed on the printer. The list shows each filename, its type and length (blocks) and what volume (vol name) it's from. The vol name change from FILE ORGANZIER is good for this.

Overall, the programs and documentation are very well done. The programs are written in BASIC (with machine language) and worked without problems. The 3 programs provide a nice variety of needed utility functions. One NOTE: I found a very close similarity between TURBOLOAD and FILE ORGANIZER to FASTLOAD and Basic Systems Manager from Practical Programs (reviewed in DEC. issue). Turboload and Fastload are basically identical. The only difference was that one version produced a binary file 8 bytes longer. The BSM and ORGANIZER programs do the same function, although ORGANIZER lets you mark off the desired files first. It also displays all files and their lenght. Smartkeys and option selects were done very close to one another. This is just an observation.

RATING: B

BASIC ADAM
"A Self-Teaching Guide"
Abikoff & Cornell
Review: W. Motel

This book is part of the publisher "John Wiley & Sons" self-teaching guide series.

The chapters are logically presented to build your knowledge up. They suggest you sit at the keyboard and work through the book, as they give many fine examples throughout the book. Each chapter also includes self-check questions (with answers), a chapter summary and a list of buzzwords.

Throughout each chapter there are plenty of great examples and small programs given to demonstrate the covered material.

The chapters include everything from what is the ADAM & computers in general, BASIC & its structure/instructions, LO-res/HI-res graphics, thru sorting, subroutines and top-down programming.

They explain (very well) things like the string commands (MID$, STR$, etc), HI-res curve/circle creation routines and various special print commands.

What impressed me most about the book is that it is not only great for the beginner, but also includes some of the

advanced tricks/routines not normally covered in other ADAM books. They also explain what things don't work.

Full programs included in the book
- Shape table generator
- Music program
- Many small programs/subroutines
  - sorting
  - list comparing
  - file handling

The appendix includes
- Full ascii code/display list
- control key/letter commands (keyboard & print)
- error codes and meanings
- math formulas and corresponding ADAM code
- ADAM/Applesoft BASIC differences
- glossary of terms
- excellent 9 page ADAM reference guide

I highly recommend this book for ANYONE. Prior to this, the best book (in my opinion) was the "ADAM's Companion". This surpasses that book. You won't be disappointed.

RATING - A+

Coleco ADAM User's Handbook By L. Marschand

This book is published by Weber Systems. I think it is well geared for the novice computer owner in that it has a step by step approach with good explanations.
Here is a brief description of each section of the book:
I. INTRODUCTION - 8 pages of general computer information, term definitions, etc.
II. ADAM INSTALLATION/ TROUBLE SHOOTING - 11 pages on how to set up the ADAM
III. SMARTWRITER - 39 pages covering the basics of SW
IV. INTRO TO SMARTBASIC - 11 pages that give an excellent overview and background to those who have no prior knowledge of SB.
V. BASIC INSTRUCTIONS
A) Data types and variables - 15 pages
B). Input/Output of data - 10 pages
C). Conditional branching, loops - 8 pages
D). Tables and arrays - 9 pages
E). User functions; strings - 12 pages
F). File handling - renaming, delete, save, init, lock, unlock, open close of sequential/ random files - 23 pages
G). Graphics - very brief overview - 11 pages
H). Reference - a listing of all commands and small sample programs of how to use them - 63 pages
J). Four basic programs with explanations - Metric conversion, Loan Analyzer, Breakeven Analyzer, Telephone book

This book is good for the beginner, but not for the intermediate or advanced ADAM owner.

Rating - B

Expansion Module #3 Conversion Kit By L. Marsch

This is the long awaited kit for you ADAM Expansion module #3 owners who want to use a monitor, rather then a TV for viewing. As many of you know, the quality of the picture on a TV ranges from tolerable to bad and even may result in loss of the one of the edges of the picture. A monitor corrects these problems be eliminating the need for the picture to go through a tuner (the video signal goes directly from the ADAM to the monitor). Monitors also have adjustments for horizontal centering which eliminates the loss of picture at either edge. Anyone using the ADAM (or any computer) for text work really needs a monitor to eliminate eye fatigue and strain.
This modification kit from Eve Electronics extracts the proper video and audio signal from the back of the Colecovision unit to connect via a special ADAM cable (same one as used for the complete ADAM system) to connect to a monitor.
The kit consists of a manual with well done diagrams and instructions and a monitor jack plug with some components and three wires that must be soldered INSIDE the Colecovision unit. The instructions from Eve explicitly state that this kit should NOT be installed by those not familiar with working with solid state electronics, soldering, etc. The kit may be installed by a local Tv repair shop or for $49.95 Eve will do the whole job for you. This of course requires you to send your game unit to them in Massachusetts.
For those of you that have the kit building experience, the step by step instructions are well done, clear and I don't think you should have any problems. You of course need a low wattage soldering iron that has an isolated (grounded) tip. A hole must be drilled in the back of the game unit to accomodate the monitor plug connector and two small screws are provided to secure it in.
The only thing that wasn't clear to me was what "proper dressing" of the wires meant. According to Eve, the video signal produced by their unit is equal to that which comes from the complete ADAM systems monitor cable connector.

Rating - A

CHATTERBOX VOICE SYNTHESIZER By L. Marschand

This is a voice synthesizer kit developed and sold by AAL Computing of California as advertised recently in Family Computing magazine.
The "kit" comes with a 34 page manual (8 1/2 by 11 and printed on the ADAM) and ALOT of parts. As I understand it AAL is now only selling the manual and not the parts due to some difficulty in the their ability to find the parts in quantity. Unfortuneately, I could not contact AAL (no phone number) to obtain confirmation on this. The manual sells for $10.95 including shipping and is worth the price if you want to really get into speech synthesis on the ADAM.
AAL's address is :
PO Box 8006
Laguna Hills, CA 92654

I definitely want to encourage new ADAM hardware and software developers and I think AAL has real potential. After looking over the "kit" of parts supplied I would have to say that only one experienced with electronic kit building could tackle and succeed to put this speech synthesizer together. There are 20 parts and a fair amount of soldering is required. A 15 watt soldering iron, side wire cutters and a tool for stripping the "tracks" that are not required off the circuit board are required to build the kit. The circuit board is a standard prefab one that can be used for any purpose and must be modified to suit each kit. To modify the board the presoldered traces must be cut with a special tool. Really, any sharp tool like a knife can be used to cut these traces. A diagram is provided to indicate which ones have to be cut. This is probably the worst part of the kit building and the whole kit could be simplified if a circuit board specific to this kit could be supplied. However, I know that this is expensive. I did not have the time to build the kit myself (it was actually given to me by the purchaser to review for the newsletter), but am sure it would work based on my review of the manual. A connector is supplied which attaches the board to the expansion slot on the side of the ADAM.

The Chatterbox utilizes the same voice synthesizer chip (General Instruments SP0256) as the Eve SS-CC speech synthesizer and hence the voice quality and programming will be the same (I have had many inquiries about this).

I recommend this kit for the avid kit builders only, not a novice. You will have to decide whether the kit price of $52.45 is worth it.

I highly recommend the manual, it is well written and provides a wealth of information for those who want to really get into speech synthesis. There is a "Theory of Operation" section that gives technical information on how the synthesizer works with the ADAM. A schematic and pinouts of each IC are also included.

The best part of this manual is the detailed explanation of speech, allophones, phonemes and how to use them to construct words for the synthesizer. Care is taken to describe how to obtain more "human like" words by correctly mimicking human speech patterns - i.e. correct use of consonants at beginning versus the end of a word, duration of sounds and pauses. The correct use of these techniques will result in better speech output from the ADAM. A dictionary for about 90 words is included in the manual, giving the allophones needed to construct each word. Two sample programs are also included.

It is obvious that AAL put alot of time and hard work into this manual and the kit and I congratulate them for it. If you want to really get into speech synthesis an the ADAM I recommend the manual, but would personally buy the SS-CC manufactured by Eve.

Rating - B+

. There is another ADAM User's group in Canada:
M-TAG (Metro Toronto ADAM Group)
Box 123, 260 Adelaide St East
Toronto M5A 1N0
The following people can be contacted to get information about the group. Bill Freads 588-1619; Dave Selvyn, 291-2002; Lorne Schumach, 221-9743, and Len Pratt, 594-0769.
I recognize a few NIAD member names amongst the above.

. Dave McIntosh would like to hear from ADAM users, from anywhere.
Write to 7 Monsarrat Crescent
London, Ontario N5Y 4Y7 1-519-679-0578

.Stan Nowak II is starting an ADAM run BBS in California, called the Squared Circle. It is online from 4 PM to 8PM (Pacific Standard time) Monday thru Friday at 213-644-0529.

. I am enjoying my membership in your club and thus of my ADAM. I've has it just a month, so I have many of the needs of a new owner and am experiencing the growing interest of many such owners in expanding my use of ADAM beyond mere word processing (though that's really all I bought it for).
I have missed some things you may well have supplied to your readers at that start, but I do applaud the "New Owners Workshop" idea in the January issue I just received. The trouble is that there should be something like that (expanded quite a bit) sent to every new member at the start. I had hoped to get some such thing with my first issue but didn't.
- E. Taff
Thank you for your comments and suggestions. Ironically we have recently decided to create a "New Member" handbook and hope to have it done by April.

. A. Rumble offers the following tip for SmartFiler users. In order to print just one record at a time out of a list of records - i.e. for mailing labels or envelopes, when creating your format in SmartFiler add carriage returns until you can't add anymore (ADAM will buzz at you), move your sursor UP TWO lines and enter a period. When you go to print, only one record will print, after which ADAM will stop and you can insert your next envelope or whatever.

. First of all let me sing the praises of NIAD and thank you for the newsletter. I have found no comparable source of information about the ADAM. You've shown me what a remarkable machine I have, and how it is superior to other personal computers, while remaining completely frank about it's limitations. The newsletter satisfies every level of interest and ability, from instructions for beginners to some quite sophisticated "pokes". And your workshops insure that none of our software will be closeted away. You've given us the courage to learn to program. But the greatest compliment I could pay is to tell you we're full of ideas and questions. Perhaps I can gather those ideas and questions on paper soon.
-S. Petro

Thank you very much for your encouraging comments, it is great to see that NIAD is helping ADAM owners as you describe since this is our basic objective.

. I tried ordering Nevada Cobol from Ellis Computing, but they stated that they do not sell it configured for the ADAM. Will it be available from NIAD ?
Also, I wrote to Alpha One to order Multiwrite and they returned my check indicating they did not know when it will be available. I am presently teaching Wordperfect on a DEC Rainbow and would like to have a word processing program which will allow me similar functions such as centering, bold print, underline, date, right justify, headers and footers. Do you have such a program available ?
- E. Varner
I have on my list of TO DO's a project ot get Nevada Cobol converted for the ADAM - I can't promise when at this point, however,
Relative to Multiwrite from Strategic software, we should have a full review on this new word processing program for the ADAM in next months issue.

. Don Zimmerman (an avid NIAD supporter) sends this advice for making your disks double sided as discussed in our last issue.
TIP - A protective insert that slips between the disk surface and the bottom of the hole punch will help to protect the disk surface from scratching when punching the holes to convert disks into double sided. This insert is cut from a manilla folder and measures 1 1/2 by 4 1/2 inches.

. I'm a recent subscriber to your newsletter an customer.
While I am pleased with your newsletter, I regret to say that I am less than satisfied with the products that I have received from you. I have prushased 3 items from you and have found flaws in all of them.
The first item, NIAD UNDVI, has no file in README and when I try to load "fatfont" I get a "file type mismatch" error message. Admittedly these are relatively minor deficiencies and I would not be overly concerned if my subsequent purchases had not had more serious problems. The next item was NIAD CP/M # CNDV1. This bundle will not run at all. The message I get is "missing block" along with the advice to "retry, adjust media" or "abort". The third item was ten NIAD ddps. The instructions say that they can be used as received to back up SMARTbasic or any ADAM program. I have not been able to make a back up copy of Recipe Filer using these data packs. I was also unable to make a copy of the EBU tape that I purchased from MW Ruth Co.. I then tried to use one of the data packs to store a SMARTWriter file. I initialized the DDP as instructed with the SMARTBasic, but when I tried to store the file, the computer said that it could not address that file.
I addition I noticed that, when I tried to use your DDP, the drive sometimes ran very slow. Much slower than I have ever seen it run when using an ADAM or Loran DDP. I suspect that the torque in these Sony cassettes that you used may be high and I am concerned that these cassettes may overload the drive. These cassettes sell for about eighty cents a piece in our local Wallmart store and I have seen them on sale for as little as as $.63/each in packs of three. It may be that they are not

subject to rigorous quality control.
I have not done anything with the CP/M language to date. I was hoping your program bundle would help me in getting started with the format. I am not, therefore, overlooking the possibility that part of my problem may be that I don't know what I am doing. Consequently, I want to give you a chance to reply to my complaints before I send everything back to you and ask for a refund. I think that you can understand, though, why I do not plan to make any more purchases from you. When dealing with a vendor, I expect to be satisfied most of the time. My experience with you, however, has been the opposite. I will probably continue to be a subscriber to your newsletter and may even purchase some of the back issues, but I do not intend purchase any additional software or supplies from you. If it develops that I have misapplied the materials that you sent me and you can tell me how to get them to work, I will not send them back. Nevertheless, I believe that the product should arrive with sufficient instructions and documentation that permit their use by the relatively uninitiated. I am certain that I am not the only ADAM owner who is in this position. And it is just this kind of customer tht you will lose if they become frustrated with products that they cannot get to work.
I will appreciate a response from you and I truly regret the necessity of this complaint. I must confess that I want to see you succeed in your endeavor because it will benefit all ADAM owners. For this reason, I hope that my criticism works constructively to your benefit as well as to the benefit all of your present and future customers.
- H. Kealey

Thank you for your letter of 1/28. I appreciate the constructive way you approached telling us about your problems with the Public Domain volumes and the blank DDP's.
Firstly, lets discuss the PD issue. The concept of PD is to make available a large number and variety of software to members at a near zero cost (there is no charge for the actual software itself, only the media and handling). These programs are ones written by other NIAD members or adapted from other computers, books, magazines, etc. NIAD members volunteer to test and organize these programs into volumes for the other members. Please understand that these fellow members do not have the time to rigorously test each and all aspects of every program. They do their best, but "bugs" may be found in these programs. This is to be expected in any PD software. I will say that VERY few of the NIAD PD programs have been found to have bugs in them. We end up not putting many of the programs submitted into our PD library because they do not meet our standards.
Since our membership consists of ADAM owners with varied experience, some of the PD programs will be "over the head" of some novices and some will be too simplistic for the expert - hence, we try to put a variety of each to please everyone. We are aware of a problem with the real novice ADAM owners who need alot more information then the "average" NAID member.
This is why we have added additional Workshops geared towards these new ADAM owners. Also, we are beefing up the documentation supplied with the PD volumes (see Public Domain Workshop in this the people who submit programs to PD to supply

documentation. However, this is not always done and we then
have to decide whether to leave what may be a good program and
one readily understood by most NIAD members out of the PD
library because some of the novice members may not be able to
understand it. I think it would be a disservice to all NIAD
members to gear NIAD to only a select group of people.
However, I realize that this may result in some problems.
Believe me Harry, we are doing everything possible to
adequately serve ALL NIAD members.

We have had occasional problems with our duplication of data
packs and have learned over the past year. I now do all my own
duplicaton on the ADAM itself, which is a tedious and time
consuming process. We also now only use data packs manufactured
by Loran, who are the ones who have the patent on the ADAM data
pack and offer the most realiable products - again at an
increased cost to us !

Now, to your specific problems.

The "fatfont" program on Utilities volume UNDVI is a machine
language file that can not be run from Basic, rather it is used
by the "fontedit" program. These programs were covered in some
articles in the March and May 85 issues. These programs are
NOT for the novice. We have added more documentation to the
UNDVI volume to explain this.

Your problems with the Sony data packs could be for a variety
of reasons. The Sony tapes have been the most reliable next to
the Loran and are sold by the thousands by most ADAM suppliers.
As stated above, we now only use Loran tapes.

Relative to CPM 2.2, our PD volumes will not help a novice
learn CPM. I have consistently stated that CPM is not that easy
to learn and requires study PRIOR to trying to run programs. I
would guess that you are incorrectly running these programs.
Please read the CPM 2.2 Workshops in the NIAD issues 7,8 and 9
for more "basic" information on CPM.

NIAD is a quality supplier of ADAM software and hardware and I
would suggest your conclusion to not purchase any additional
products is a hasty one, but one that you need to make.
Enclosed find the updated version of PD volume UNDVI (more
documentation added), 10 Loran tapes and a replacement for
CNDVI on the off chance that it is bad. Please return your
shipment so we can ascertain the problem.

NIAD's goal is to be the premiere ADAM Users Group, newsletter
publisher and product supplier. I'm sorry for any inconvenience
this has caused you and really do thank you for your letter. I
think that it and my response will benefit the ADAM novice.

SOFTWARE EXCHANGE

NIAD supports a software exchange for all members in order to
supply public domain and non-copyrighted programs. "Libraries"
will be maintained for each of the major software products by a
NIAD member. Current librarians are:

SMARTBASIC   >>>>>>>>>> B. Lennes
                             14637 Atlantic
                             Dolton, IL 60419

SMARTLOGO   >>>>>>>>>> Barry Wallis
                             2140 Bessant St
                             San Bernadino, CA 92404

ADAMCALC   >>>>>>>>>> Greg Van Valkenburg
                             701 Pond View Dr
                             Audubon, PA 19403

UTILITIES   >>>>>>>>>> L. Marschand

CPM 2.2 ## MIDWEST/EAST##>> C. Kolander
                             1295 A Pearl Ave
                             Glendale Hts, Il 60139

CPM 2.2 ## WEST COAST## >>> Robert Baker
                             2007 Lincoln Apt C
                             Alameda, CA 94501

SOFTWARE EXCHANGE RULES:
NOTE: WE ARE CHANGING AND WILL ONLY PROVIDE LIBRARIES ON DDP,
NOT DISK.
ADDITIONALLY, YOU HAVE THE OPTION TO PURCHASE A SPECIFIC
LIBRARY FOR ONLY $ 6.00 FROM THE NIAD PRODUCT LIST IF YOU DO
NOT HAVE A PROGRAM TO EXCHANGE.
In order to receive all the library programs in a   specific
library send a ## DDP ONLY ## with one program for the library
(all programs should be tested and well documented via a
separate "readme" file) to the librarian. Include a self
addressed and STAMPED return mailer. The librarian will copy
the entire library on your DDP and return it to you.
NOTE: I have had some complaints about the requirement of
submitting one program to get the software library. Please be
advised that these programs don't have to be written by
yourself. They can be any non-copyrighted program that you may
get from a book or magazine. You non-programmers can do us all
a great service by typing in these programs, running them to
make sure they work and sending them in. I don't think this is
too much to ask for what you will receive.
Everyone, please submit your programs to create an expansive

SOFTWARE (DDP UNLESS NOTED)

SMART LOGO 7600	$ 51.95
EXPERTYPE 7602;9610 DSK	$ 31.95
SMART FILER 7813;9656 DSK	$ 15.95
RECIPE FILE 7814;9657 DSK	$ 15.95
SMART LTRS/FORMS	
7805;9613 DSK	$ 20.95
FLASHCARD MAKER 7662	$ 20.95
FLASHFACTS (TRIVIA 2902,	
HISTORY 2901,VOCAB 2900)	$ 11.95@
ADAMCALC 7831	$ 31.95
R. SCARRY'S WORDBOOK 7658	$ 20.95
DRAGONS LAIR 2683	$ 24.95
WACKY WORD GAME 7834	$ 15.95
CPM 2.2 & ASSEMBLER	
7832	$ 49.95
SUPER ZAXXON 2623	$ 24.95
BEST OF BRODERBUND: AE &	
CHOPLIFTER 7850	$ 24.95
HOME SFTWARE LIBRARY 7826	$ 39.95
2010: TEXT ADVENTURE	
GAME BY MGM/UA 7849	$ CALL
FAMILY FEUD 7710	$ 20.95

OTHER SOFTWARE- SPECIFY DDP OR DISK

BOUNTY HUNTER VS4048	$19.95
ADVENTURE PK I VS4011	$19.95
ADVENTURE PK II VS4015	$19.95
VIDEOTUNES (DDP ONLY)	$26.95
(FUTUREVISION)	
EXT BASIC UTILITIES	$19.95
FANTASY GAMER (DDP)	$29.95
BASIC BONANZA	$29.95
DIABLO	$19.95
SOFTPACK I	$18.95
LVAC ARCHIVES I	$ 9.95 SPECIAL
REEDY SOFTWARE LIB	$22.95
QUICKFAX QUEST	$22.95
PERSONAL ACCOUNTANT	$19.95
SMARTBEST	$16.95 NEW
STRATEGY STRAINER I	$19.95 NEW
BUSINESS PACK	$18.95 NEW
1985 1040 TAX PLANNER	$19.95 NEW
PAINTMASTER	$22.95 NEW
TURBOLOAD	$26.95 NEW
SIGNSHOP	$22.95 NEW

CARTRIDGE SOFTWARE

DAMBUSTERS 2686	$18.95
ILLUSIONS 2621	$18.95
BC II: GROG'S	
REVENGE 2620	$18.95
SPYHUNTER 2617	$18.95
TAPPER 2616	$18.95
SMURF PAINT AND	
PLAY 2697	$18.95
FIX UP MIX UP	
PUZZLE 2699	$18.95
MONKEY ACADEMY 2694	$18.95
TELLY TURTLE LOGO	
GRAPHICS 2698	$18.95

NIAD USER'S GROUP PRODUCTS:

I. NIAD PUBLIC DOMAIN SOFTWARE

COST IS $6.00 FOR EACH VOLUME ## INCLUDING DISK OR DDP
SPECIFY VOLUME # AND DISK OR DDP###

SMARTBasic	Volumes I-10 #BNDVI-10 (10 different volumes)
SMARTLogo	Volume I #LNDVI
ADAMCalc	Volume I #ANDVI
BASIC Utilities	Volume I #UNDVI (INCLUDES BACKUP UTILITY PROGRAM
CPM 2.2	Volumes I-15 #CNDVI-15 (15 volumes available)
JEOPARDY	
PINBALL/ MACK	
TROLLS TALE	
ADAM DIAGNOSTIC	

II. SOFTWARE

SMARTGAMES PACK	$ 9.95 DISK NEW
	$ 11.95 DDP NEW
ROYAL AMBASSADOR EDUCATION	
PACK I	$ 14.95 DISK NEW
	$ 16.95 DDP NEW
CPM NEVADA BASIC	$ 39.95 DISK/DDP NEW
SP-1 CUSTOM SFTWARE FOR	
SMARTWRITER /FILER (AVAIL-	
ABLE FOR MOST PRNTERS)	$ 20.00

**** NIAD SPECIALS ****

EVE SS-CC & ME64K	$ 144.95
EVE SP-1 & PANASONIC 1080 PRNTER	$ 369.95
RECONDITIONED DIGITAL DATA DRIVES	$ 19.95(instructions/30 day guar)

NIAD SOFTWARE PACKAGE- includes $ 34.95 DISK
following 3 items: $ 38.95 DDP
. SUPERGAMES PACK
. ROYAL AMBASSADOR EDUC PACK
. 5 DDP's or 10 DISKETTES

MARTIN SOFTWARE - includes BOTH $ 44.95
. BASIC BONANZA
. FANTASY GAMER

CONVERSION OF SUPER GAMES TO DISKETTE: $ 4.00 EACH
NOTE: YOU MUST SEND IN THE LABEL CARD FROM
THE GAME AS PROOF OF PURCHASE EDUCATION PACK II
FAMILY FEUD; BEST OF BRODERBUND CAN BE COPIED DIRECTLY
BY MOST COPY PROGRAMS

BACK ISSUES OF NIAD NEWSLETTER FROM 1/85 $ 3.00 EACH
         $ 2.50 EACH 10 OR MORE

SQUISH EM SAM CARTRIDGE $ 9.95
INCLUDES TALKING VOICE -NO ATTACHMENTS REQ'D

PRICES VALID 3/1 to 4/1/86

Be delighted with the Lord and He will give you all
********* your heart's desires. PSALMS 37:4 **********

CP/M 2.2 COMM'L SOFTWARE - RECOMMEND DISK ONLY

NOTE: REQUIRES ADAM CP/M SOFTWARE # 7832

INFOCOM PRODUCTS:

Planetfall	$34.95
Starcross	$39.95
Zork I	$34.95
Zork II	$39.95
Zork III	$39.95
Deadline	$39.95

HARDWARE & ACCESSORIES

ADAM DISK DRIVE 7817 $185.00

5-1/4" high-capacity disk drive for the Coleco Adam. Provides expanded capability for faster storage and retrieval and increased reliability. Requires standard diskettes.

ADAM LINK MODEM   7818 $ 69.95

ADAM phone modem which provides capability, with included software, to interface with other ADAM computers or large bulletin board systems such as Compuserve. Includes coupon for receiving advanced communications software for uploading and downloading of programs.

COMPUSERVE STARTER KIT $ 25.95

Includes account number, password and five free hours of connect time to the popular compuserve information system.

EVE 64K MEMORY EXPANDER   ME-64 $ 49.95

Provides additional 64K of memory for SMARTWriter, CPM programs. Provides print buffer spooling for ADAMCalc.

EVE RS232/PARALLEL INTERFACE SP-1 $139.95

Allows the connection of the ADAM to any popular printer and other devices requiring either serial or parallel interface connections. Includes software for directing print to additional printers directly from SMARTWriter, SMARFiler, BASIC, CPM programs. Includes EITHER parallel or serial cable - specify which one desired.

PARALLEL OR SERIAL CABLE SP-1C $ 9.95

Second cable required to attach SP-1 interface to parallel or serial printers.

SPEECH SYNTHESIZER/CLK CAL SS-CC $109.95

Output voice speech and words via Basic and CPM programs. Includes software to construct words. Real time clock calendar provides continuous date and time accessible from Basic and CPM.

EVE 80-COLUMN VIDEO/MOTHER BOARD

POWER SUPPLY   VD-MB $299.95

Provides 80-column video output from the ADAM to a monochrome 80-column monitor. Also includes separate power supply and expansion slots for attaching other EVE products. Light pen port attachment also included. Expands ADAMS capability for software requiring 80-column display.

** Includes Word Processing and Basic software programs **

EVE MON-80 $299.95

80 Column video board and monochrome monitor assembly. Includes cable to attach to inside of ADAM console. Does NOT include independent power supply or motherboard

** Includes Word Processing and Basic software programs **

EVE POWER SUPPLY FOR ADAM PS-1 $ 69.95

EVE MULTI-UNIT ADAPTER   MA-3 $ 44.95

Special adapter cable required to attach both the SP-1 and SS-CC to the ADAM. NOTE: Not required for 80-column video board.

CARD EDGE ADAPTER CEA-1 $ 5.00

For attaching ADAM Autodialer to MA-3 cable.

ADAM PRINTER TRACTOR FEED $ 72.95

Hooks unto the ADAM printer as originally designed to provide for feeding of pin-fed continuous form paper. Provides consistent alignment and advancing of paper. All metal design - guaranteed.

PRINTER STAND/ON/OFF SWITCH $ 15.95

Provides raised legs for the ADAM printer and relocates the on/off switch to the front of the printer for easier access when loading paper.

MONITOR CABLE   7830 $ 9.95

Required to hook complete ADAM console to a video monitor. Supports both picture and sound signals.

ADAM DUST COVERS

3 pieces for complete ADAM system	$ 18.95
Disk Drive Only Cover	$ 8.95
3 pieces for ADAM Colecovision Expansion Unit	$ 23.95

PRINTER WHEELS $ 5.55

Replacement printer wheels for the ADAM printer - Gothic 12 /Script 12 /Elite 12 /Emphasis /Courier 72/Pica. Specify font desired.

TAPE DRIVE HEAD CLEANING KITS $ .50

ADAM REPLACEMENT RIBBONS   7806 $ 4.95

COLECO/LORAN DATA PACKS -ADAM FORMAT $ 4.75 @
                          10 for $ 39.95

NIAD/LORAN DATA PACKS -ADAM FORMAT $ 4.25 @
                          10 for $ 34.95

NIAD UNFORMATTED DISKETTES - DS/DD 1- 9 $1.50 @
                          10 or more $1.20 @

MONITOR ADAPTER KIT FOR EXPANSION MODULE
                EXP-MOD $ 29.95