# E-COMPUTER O NEWS



# DEDICATED TO ORPHANED COMPUTERS



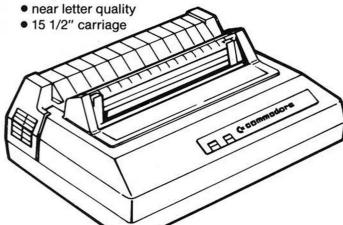
#### PRESENTED BY

NORTHWEST MUSIC CENTER, INC. 404 INVERRARY LANE DEERFIELD, IL. 60015 708-808-7000

## PRINTER CORNER

#### 8023P 160 CPS Printer

100,000,000 characters



#### PRICED AT \$179 US ADD \$16.95 SHIPPING US

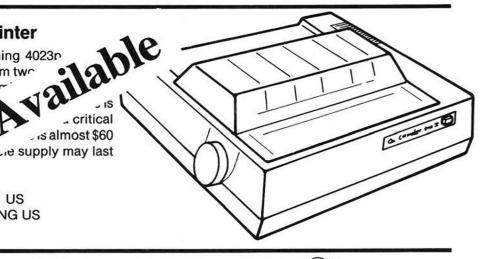
The 8023p supply is in an unpredictable position at the moment. Before we could place a large order with Commodore for these printers, they sold all 1,600 of them to a large import-export firm. At this time we have not been able to locate where they were shipped. The available supply of these may also be very limited.

#### CBM 4023 Printer

Unfortunately, all the remaining 4023rd were also sold to a Canadian firm two We have located a small num rehabilitated 4023p printers

larger than the 6400 r state. Note that ? without inc'

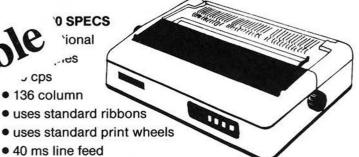
RICED AT \$99 US ADD \$9.95 SHIPPING US



#### Commodore 6400 **CBM 6400 Daisy Wheel Prints**

Commodore has sold all their reprinters to a company in Canada 6400 printers that we could " Item Not If you still desire one c' few available. Th by the end beca.

Je depleted art wait on these Jocating any more.



40 ms line feed

..es

J cps

• 136 column

 Parallel centronics interface or IEEE interface w/Parallel centronics . . . . . . . . . . . . . . \$450 w/IEEE..... \$450

## NORTH VEST CENTER

404 Inverrary Lane -Deerfield, Il. 60015 Hours - Voice Only Phone: 708/808-7000 Mon.-Thurs. 12:30-5:00, Sat. 12:00-4:00

## NORTHWEST COMPUTER NEWS

**Dedicated to Orphaned Computers** 

404 Inverrary

Deerfield, II. 60015

(708)808-7000

#### NORMAN DELETZKE JR. 1944-1990 In memory

#### CBUG LOSES LEADER

Norman Deletzke Jr., former president of CBUG, passed away on October 31st, 1990. He developed a brain anurism and expired peacefully. It was unexpected by all of us who knew him closely, though I feel he was aware of his condition.

It is unusual to find a person that influenced as many lives as Norman did. From his work in the audio industry, devotion to CBUG and his recent acquisition of the business he founded, Norman touched thousands of lives in many profound ways. He was always generous with his time and never turned down a request for help.

I remember when I first met him in 1984, I had recently purchased a B-128 system from Protecto Enterprises. One of the owners gave me his name and said I should contact him regarding a local user group. Since I desired more information about the system, I called him and arranged to meet him at his house. I'm not sure how long we talked, it was probably several hours but we covered many general topics including morality, religion, business, law, computers etc. Norm was a people person and he loved to communicate.

He decided to form a local user group and unite the local B-128 users. The local group was soon established and when the national group faltered, it was Norm that stepped in and took the reins. He gathered the names of all the purchasers of the B-128 from Protecto and expanded the group under the name of CBUG Inc. It was an enormous task, as he had to hand write all the entries as he searched through Protecto's

(Continued on Page 4)

#### **Table of Contents**

Norman Deletzke (In Memory)	1
Superbase Multi-Indexing	1
Editorial	2
To B or Not to Be	3
Dos 2.7 Crashes and How to Avoid Them	3
Superpet and Supercode	4

#### **Hints and Tips**

Question: I have noticed that my machine crashes and does strange things sometimes when I load Superscript or Superbase. Is my machine self-destructing or on its way to computer heaven.

Answer: Hopefully not! Check and see if you have a blank unformatted disk in drive one when you load these programs. If the program finds a blnak disk in drive 1 when you load it will crash. If anyone has further information on this please let us know.

#### SUPERBASE MULTI-INDEXING

A Reality? by Bruce Faierson

One of the many suggestions we receive regarding B-128 and 8096 programs is that Superbase 2 should allow more than one index per file. This indexing limitation restricted us greatly when we developed our inventory system. We wanted to access records quickly by either item or by stock number. If you have ever tried to access a record in Superbase by anything other than the key field, you know how time consuming it can be.

#### Superbase Indexing

Indexing is the process of organizing a key field and pointers to record data so you can virtually access any record instantaneously. Superbase allows for only one index or key per file and up to fifteen files per database. Superbase does allow linking of files or the capability to access a key in another file by the same field name and data in the first file. This capability is referred to as semi-relational and where the theory of a pseudo dual-index for Superbase originated. We spent quite a bit of time devising a method of accessing a second field in the file quickly. Then a revelation occurred! Use the linking capability to imitate a true multi-indexing scheme.

#### Linking the Files

This process requires that you define a key in your second file and relate it to the linking field in your primary file. Simply put, the information key in your second file must have the same field name and data as the linking field in your primary file. We are assuming that you desire to get at the information in your database by more than one key.

#### Example

As an example, in our inventory system we wanted to access either the item or part number. So we set up an ask statement to get our search information. Note that the information we enter can either be the item or the stock number. In the first match we will look for the information in the item field. If this doesn't match we can use the linking feature to access the stock number information in a second file. Therefore, the stock field in our primary file is going to be the key field in our secondary file. We will also store the item field in the second file and use it to return us to our primary file and display the requested information.

#### Limitations

Why do all of this convoluted programming? If you don't have your key data but do have the stock number, you can use the stock number to get to the data in your key file in this roundabout way much faster than any other searching technique. The down side is that it requires two files to accomplish this. Each record will consume 128 bytes and you must use two records, one per file, to store related information. It

#### FROM THE PAST TO A NEW FUTURE

It seems hard to believe that the B-128 User Group has been in some form of existence for over six years now. I believe it is a tribute to the unusual nature of the machine, to have the support and loyalty as its many users have given it. The open architecture of the machine, built-in expansion ports, co-processing capability, efficient cpu, engineering and software developing of its members has kept this machine heavily used by its loyal installed user base. Did you know this machine was designed between 1981 and 1982?

Consider that Commodore supported the machine for only a short period of time, even though they certainly cooperated when Norm Deletzke gently requested their help. It truly showed the power of this group from the littlest hint and tip to the major software and engineering contributions of Gary Anderson, Liz Deal, Tony Goceliak, Howard Harrison, Dennis Jarvis, Warren Kerneghan, Fred King, the Lemkelde brothers, Warren Swan and many, many others. Please don't be offended if I left your name out.

By now you all know that Norman Deletzke, our late leader, passed away. I can't let what Norm and his family founded end without a fight. Barbara, Norm's widow, does not have the time or the knowledge of the machines to continue with CBUG. She is currently working very hard to keep Audico going. As many of you know, it is very difficult to take over a business as technical as Audico is and run it by yourself.

Due to her generosity, she is making the CBUG mailing list and the library available to Northwest Music Center Inc. to continue Norm's work. Please be aware, that CBUG Inc. and NWM Inc. are two separate corporations and owned by totally different people. From this point on, please contact NWM Inc. regarding questions and referrals for equipment or help. Please do not call Barbara except to express sympathy or for products related to her businesses as she is extremely busy trying to get things in order.

It is our intent to publish a quarterly newsletter, remaster the library, correct errors in disks if notified of such and continue to promote the use of the CBM Pet type computers. These include the 8000, 9000 and B series models. One thing that we can not do is replace Norm, no one could! PLEASE LIMIT CALLS FROM 12:00 a.m. CST TO 7:00 p.m. I have a family and want to keep it. We will try to keep the tradition of the group going.

Please call your questions in, it takes way too much time to type out and form even the simplest response to a question. We would have to hire help to do this and it would be too costly. If you checked how long it takes to type a typical letter you can imagine how long it would take to type tens or hundreds of them.

We need articles from you to keep this publication going. We can't rely on Tony Goceliak for every article in an issue. We need everything from hints and tips to new software, product reviews, engineering ideas and projects, tutorials and whatever. I know for a fact that there are a lot of you out there that have done a lot more with these machines that you have told anyone about. All of us would like to hear about them. These machines have a future even if you move to another system!

The format of the articles should be as follows. True Ascii or CBM Ascii, flush left and ragged with no indentations, carriage returns or carriage returns plus line-feeds at the end of every paragraph and no formatting information such as justification. The simplest paragraph could be a line such as in a program listing. Note that this publication was written with several word processors including Superscript II and fed to a publishing machine to typeset.

Future issues will be dedicated to a Best of Hints and Tips for the B and the SuperOffice-Superbase environment. We hope to include a Q&A column, a course in assembly language, Yell for Help group and other continuing columns.

Lastly, the inevitable, to help defray the costs involved with the publication we have to ask for a subscription fee. Note what we are dealing with here is file conversion, layout, typesetting, printing and postage let alone the labor of putting it together on a small basis. The first issue here is complimentary out of our pocket. We are asking for a \$14 fee for the year which includes four issues on a quarterly basis. Please understand that these will not be books ala' Norm. If we receive that much material that we need to increase to an issue that large, we will publish it.

As Norm would have said, "Take care", Bruce

#### Hints & Tips

Question: I've heard that using the Jessie Knight Copy Utility is the best way to back up all of my disks. Is this true?

Answer: Jesse Knight's Copy Utility was designed to copy disks authentically with certain errors reproduced as found without the drive detecting the error. He wrote the utility to specifically make duplicate disks for registered owners of Precision Software's programs that were copy protected. His program will not copy every 8050 protection scheme on the market by design!

While this is great for protected disks, this can be hazardous for normal use. Imagine this scenario. Your drive is slowly going ganzo and writing data improperly to the disk. Assume the error that is embedded on your disk is one that will be copied faithfully by the J.K.C.U. You have just corrupted your precious data and good luck recovering it all. Remember that CBM pioneered the high density 500k format with double density disks so if you have a poor quality disk it could also cause problems.

Solution: Use the good old faithful backup command out of Basic. Type the following. backup d0 to d1 CR ?ds\$ CR. CR means carriage return. If there is an error in the backup procedure the machine will stop and display the error with this command. If this occurs, get help quickly.

Northwest Computer News

Editor Bruce Faierson
Publisher Bruce Faierson

Contributors Tony Goodlak
Northwest Music Center, Inc.

President Bruce Faierson

N.W. Music Center, Inc. assumes no liability for the accuracy of the materials presented. **Business Office** 

404 Inverrary Lane Deerfield II. 60015

**Advertising Office** 

404 Inverrary Lane Deerfield II. 60015

Phone:

(708) 808-7000

Material in this publication is copyright 1990.

All Rights Reserved.

#### DOS 2.7 COPY CRASHES AND HOW TO AVOID 'EM

Way back in one of the early issues of the Escape Ms. Deal discussed a peculiar bug in dos 2.7 which causes the drive, not the computer to crash if you request a file to be copied which already exists. There is a simple way to get around this bug as long as you don't have many files to copy, and even if you do, a simple basic program can take over the repetitive chores for you enabling you to sidestep the bug painlessly.

To demonstrate the bug, place a disk in drive #1 and format it. Put any other disk in drive #0. At this stage issuing the command: copy d0,"\*" to d1,"\*"

would result in flawless, if somewhat tedious operation of the drive. When all the clanking, whirring and humming is over a healthy drive will have copied all the files from drive #0 to drive #1. However, let's throw a monkey wrench into the works. Type: directory d0

to find out exactly what is on the particular disk you have in drive #0. Pick out any filename that you like and insert it into the following command in place of the 'xxx'

copy d0,"'xxx'" to d1,"\*" and then: ?ds\$

Provided that ds\$ was 00,ok,...etc. you now have a disk in drive #1 which has one of the files from drive #0 copied onto it. You may now power down or pull the disks or not, it makes no difference, the trap is set. Issuing the command:

copy d0,"\*" to d1,"\*"

or even the command:

copy d0,"'xxx'" to d1,"\*"

will result in the drive crashing. No damage has been done to the disk or the files, but you will absolutely have to power down the drive to make it respond to any more commands.

The common feature of these two copy commands, and one reason that not all of us have trouble with this bug is the pattern-matching asterisk in the second half of the command.

Try this command instead: copy d0,"'xxx'" to d1,"'xxx'"

Aha! the error led turns red, and now if we ask: ?ds\$

we actually get an answer, and the drive can continue with no ill effects. (i.e., no more bug!)

For only a file or two, fully naming the file in both halves of the copy command sidesteps the bug, and it matters not whether you are operating in basic or from Superscript II disk mode (although the command would change to:)

c1:'xxx'=0:'xxx'

In order to copy fifty files the added typing could make a difference, but a simple basic program such as I have included on this disk will handle all this for you. Gee it's nice not to crash my 8050 anymore.

Tony Goceliak 26 Jun 89 RFD#2 Box 433 Wesson Road Lancaster, N.H. 03584

#### TO B OR NOT TO B

In response to the question of 'should I invest more in my B system' I must beg off. Only you know your financial condition, how much and the importance of data, programs, correspondence, etc. you have already got on your b system, and how much time and effort you have put into learning to use the programs on your system. One thing I will say, the "blivit model xyz" will be no easier to use than the B, and quite possibly much harder.

Should you determine that your B is serving you well, and wish to protect yourself from system failures, my general recommendations on buying spare units run as follows:

#### 1. <u>Disk Drive</u> 2. <u>Disk</u> <u>drive</u> 3. <u>Spare</u> B 4. <u>Spare</u> <u>printer</u> 5. <u>Spare</u> monitor

I put the disk drive in first (and second!) place because it is the most complex piece of equipment in the system. Electronically it must have two 6502 processors and all their paraphernalia as well as a precision mechanical system functioning flawlessly. It is exposed to physical handling everytime a disk is inserted or withdrawn, it is connected to the IEEE bus and the A. C. main, it uses a proprietary recording method and last but not least it is subject to the whims of a replaceable diskette.

If your one-and-only drive unit has packed up, so has your access to all your files, correspondence and data. You won't even want to spend 4 hours typing in a video ping-pong game to play on your B while waiting for your drive to be fixed.

The B comes next because if it has worked this long, you are WAY past the 'burn-in' period. Barring physical abuse (coffee in the vents or fist through the keyboard) and Voltage spikes on the A. C. line, your B just might last longer than you will. However, just in case it doesn't, your disks will be useful only as frisbees until your B is repaired. If you can wait and you are sure of the quality of the repair work then you don't need a spare. If you absolutely, positively must have those vital business files accessible at all times, you need a cold spare B. Because otherwise Mr. Murphy will choose when you are "down" and locked out.

A printer or other device such as a modem comes next, because on a worst case basis you can order an rs-232 interfaced device to be delivered via federal express and then beg Norman for the name of someone to help you get it connected correctly if you can't get a Commodore printer.

The monitor rates dead last, since on a panic basis, you can connect the video output to the video input jack of a VCR and sort of limp along until you can get a composite monitor. Failing that, I hope you saved that goofy video cable from the Protecto package, because the B also provides in essence ttl output also. You should be able to get some brand of monitor without difficulty, and if you have always suffered with the "Zenith wiggles", you may even be pleasantly surprised.

As to sources for the above equipment, I can personally recommend only three companies, the first two of which are undoubtedly 'out of stock'. Protecto, Progressive Software and Northwest Music Center.

Tony Goceliak 14 Jun 89.

Hint and Tip: Watch your middle disk drive light for abnormal error flashing. If you detect unusual flashing, head to your repairman fast.

#### SUPERPET AND SUPERCODE 06 Jun 89

I hope Norman will forgive me this intrusion into the 100 % B-series newsletter, but I have recently acquired a Superpet 9000, and wish to accomplish two things;

#### 1. Let others know that I have one.

and

#### 2. Describe what a grand hunk of hardware it is.

You all know about the co-processor for the B, and our slow progress toward proper implementation of the operating systems for it. Commodore and/or Waterloo University of Ontario Canada had already gotten the 6502 and a 6809 to dance together very successfully in the Superpet (hereafter called the 'SP'). Selection of the processor can be via EITHER a toggle switch or a software switch. Sections of the bank switched memory can be protected in the same manner by a second set of switches.

If you have ever wanted to learn the other languages (listed by Mr. Faierson in his NWM ads in the Escape), this is the route. All five alternate languages are interpreted, which is the only way to learn to program. There are separate books for each Waterloo language to help you.

If you are so inclined 6502 assembly language is significantly easier to write for the SP versus the B, and the 6809 is something to behold! Doomed by the headlong rush into 'true 16 bit' computing, it is still way beyond the 6502 (or 6509!). Both index registers are 16 bits long, branches can be to Anywhere in memory, there are TWO 16 BIT stack registers, and via an 8bit 'direct page' register, you can even define your own zero-page to be any page of memory that you desire. Gadzooks, the addressing modes are indescribable, at least for a short article, but every 650x mode is there and quite a few extras.

(There is a book titled "6809 Assembly Language Programming" by Lance Leventhal, [published by Osbourne/McGraw-Hill which my local bookstore ordered for me]. It is wonderfully detailed not only as to assembly language programming but also as to the 68xx series support chips. This may or may not be the best 6809 book, but it is the only one I have read so far.)

Beyond all that, you get a machine which runs Pet 4.0 basic, an almost duplicate of our own basic but missing about 13 of our basic keywords. It also uses the IEEE bus so your existing disk drive and printer will work just by unplugging the IEEE cable from the B and stuffing it into the SP.

In summary, I am beginning to dink around with my new SP and if you already have one I would be interested in hearing from you.

Tony Goceliak RFD#2 Box 433 Wesson Road Lancaster, N.H. 03584

(Deletzke Continued from Pg. 1) files. It was he and his family that personally funded the project until the library and subscriptions helped defray the costs.

Among his many accomplishments were the numerous patents he held and the organization of the second largest dedicated computer group in the world at the time. Most important of all, he helped thousands of people in the process. This is a debt that all of us that knew him can never repay.

Above all, Norm cared deeply for his family and would talk about Barb and the kids often. You could tell in his voice that he really cherished them. The family bonds had to be really strong to get through those early CBUG years when calls were coming in constantly.

I hadn't talked to Norm as often over the last months of his life, he was extremely busy with Audico and I was in the process of another | Bruce Faierson

business move. I thought of him as an older brother and would call him up for advice and just to talk. Over the last year, he had told me several times that he was extremely concerned that Barbara and the kids would be provided for if something happened to

I believe that he knew it was coming. His suit to take over Audico at that particular time, filing suits to protect his patents and spending less time with the organization that he founded and cared deeply about, CBUG, showed his concern. The last time we talked I asked him about the future of CBUG. He said stoicly, "Getting Audico established is serious business and I must devote all my energies to it".

I miss him greatly as I think all that knew him will. I will never forget the gentleness and kindness that were his persona for the rest of my life.

Hint and Tip: Backup your data disks often on a rotating basis with several disks. Watch for error lights and type ?ds\$ CR to check for errors.

(Superbase Continued from Pg.1) without exceeding the limits isn't difficult to accumulate enough information to fill 256 bytes with valuable and related materials. This technique can be used on any number of files and keys

of your storage medium. To be time effective, both files must be open previous to your inquiry.

#### An example follows:

10 ask "Item Sold"it\$:select it\$:rem get key stock number

20 pmat:goto 120:rem if partial match goto 120

30 nmat:goto 120:rem if no match goto 120

40 goto 160:rem goto display subroutine

120 file "inventory":setlink "inv2":link it\$:rem define link info and link on the stock number as the item was not matched.

130 pmat:elink:file "inventory":goto 10:rem partial match on stock number, end the link and goto 10

140 nmat:elink:file "inventory":goto 10:rem no match on stock number goto 10

150 it\$=[item]:elink:file "inventory":select it\$:rem store item, end link, return to primary file and select item key 160 display @0@25,4[item]:display item key

by Bruce Faierson

# NORTH VEST CENTER INC.

**404 Inverrary Lane** Hours-Mon.-Thurs. 12:30-5:00.

Deerfield, IL 60015 Voice Phone: 708/808-7000 Sat. 12:00-4:00

(24 Hour Order Recorder)

## We want to be your Commodore shop!

Do you feel like no one cares about you and your orphaned computer! NWM cares!! We still stock and sell most major B series and 8000 series programs.

Parts available for some 8000, 9000 and B series models!

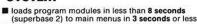
Surplus . Monthly Special . Closeouts

Franklin X I 512k 2-360k \$185.00
Lazer XT 512k 1-360k, all ports, mono, Dos
3.2 w/free Wordstar 5.0, Grammatik 3,
Word-Finder and Form
Designer only \$395.00
64K ram exp 8032 \$75.00
8088 board w/CPM-86 op. system \$99.00

Requires use of superbase

Magitronics AT 512k 1.2 floppy, all
ports, no video, plus free Wordstar 5.0, Grammatik 3, Word-Finder, Form
Designer \$595.00
9090 7.5 meg rehab \$399.00
4023p ribbons\$6.00
6400, 8300p, Diablo 630 ribbons \$4.95
8023p and MPP 1361 ribbons \$5.50
그 아이에 보고 하는 아이를 하는 것이 되었다. 그는 사람들이 되었다면 하는 것이 없는데 얼마를 하는데 없다면 없다면 살아 싶다면 살아요. 얼마나 살아 살아 살아 살아 살아 싶다면 살아 살아 살아 싶다면 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아요. 얼마나 살아 살아요. 얼마나 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살

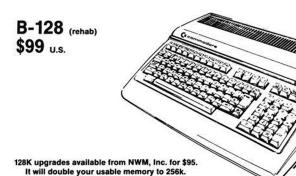
#### NWM's INVENTORY CONTROL



- on screen pop-up calculater in transaction
- most data centered function use the calculator
- versatile report features allow for 3 ways to print the same report. User selects the fastest method built in sophisticated export program allows for
- complete packing of the database

  type ahead feature allowed
- you can display reports on screen
- access to superbase menu for user developed

B-128 Version for Superbase 2



#### **SOFTWARE FOR THE B-128!!!**

	C.A.B.S. Accounting
Superbase \$9.95	General Ledger \$ 9.95
Superscript	Accounts Receivable \$ 9.95
Superoffice w/o SS2	Accounts Payable \$ 9.95
and SB1 manuals \$19.95 Requires 256k	
Calc Result or Word Result \$34.95	Order Entry \$ 9.95
Supr Disc Doc \$24.95	Payroll \$ 9.95
Superbase: The Book \$14.95	Applied Calc Result (Book) \$14.95

#### Commodore's Superpet 9000

only \$12500 while supplies

\$8500 CBM Show Model

With Five Interpretive Languages: Cobol Basic

Runs 8032 software. Great for schools and students

64K Memory Expansion for 8032 only \$75 upgrades your 8032 to an 8096.

#### COMMODORE 8000-9000 SOFTWARE & MISC.

64K exp for 8032\$75	Superbase 8096
Pet Switch\$199	OZZ Database\$25
Pet Daughters\$105	Legal Time Acc\$25
BPI General Ledger \$25	Dow Jones Program\$25
BPI Accts Payable\$25	info Designs 8032
BPI Job Cost\$25	Accounting System\$50
Superscript 8032	Calc Result 8032 \$39.95

#### SFD 1001 1 Megabyte PRICED AT \$125.00 (US) \$100 with purchase of Superpet



SFD-1001 is the drive that you should consider when you need large amounts of data storage. It holds over 1 megabyte of data on its single floppy drive. Fast IEEE access for your C-64 or C-128. (C-64 and C-128 need an IEEE interface.) Why settle for slower drives with less storage capacity. This drive stores substantially more programs and data. Think how much money you can save on disk purchases. In fact, it stores almost 7 times more information than your standard drive. Bulletin board owners love them. And what an introductory price! At \$14.93 these drives will sell fast, so don't wait. This drive has the identical format of a CBM 8250 drive, one of Commodores most durable floppy drives.

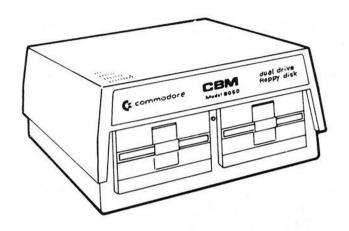
MODEL	SFD-1001	Sector/Cylinder	-
DRIVES	1 .	Sector/Track	23-29
HEADS/DRIVE	2	Bytes/Sector	256
STORAGE CAPACITY (Per I	Jnit)	Free Blocks	4133
Formatted	1.06 Mb	TRANSFER RATES (Bytes/Sec)	
MAXIMUM (Each Drive)		Internal	40 Kb
Sequential File	1.05 Mb	IEEE-488 Bus	1.2 Kb
Relative File	1.04 Mb	ACCESS TIME (Milli-seconds)	
Disk System		Track-to-track	
Buffer RAM (Bytes)	4K	Average track	••
DISK FORMATS (Each Drive	)	Average Latency	100
Cylinders (Tracks)	(77)	Speed (RPM)	300

#### ORDER NOW WHILE STOCK LASTS!

Send or call your orders to: Northwest Music Center, Inc. 404 Inverrary Lane, Deerfield, IL 60015. For prepaid orders add \$26.50 for Superpet, \$11.45 SFD 1001, \$12.45 B-128, \$11.45 4023p, \$17.45 9090 and \$645 64k memory expansion. For software and ribbons add \$3.50 for first and \$2.00 for each additional book or program. Add \$.25 for each additional ribbon. Canadian shipping charges are double U.S. For C.O.D. orders add \$3.30 per box shipped. All orders must be paid in U.S. funds. Include phone numbers with area codes. Do not use P.O. Box, only UPS shippable addresses. A 2 week hold will be imposed on all orders placed with a personal or business check. C.O.D. orders shipped in U.S. only and cash on delivery, no checks. 30 day warranty on all products from NWM, Inc. No manufacturer warranty. NWM reserves the right to limit quantities to stock on hand and adjust prices without notice!

All prices quoted in US dollars.

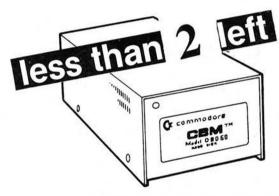
### **CBM DISK DRIVE CORNER**



#### 8050 Dual Disk Drive

The model 8050 dual floppy disk unit uses a 100 Track Per Inch (TPI) single headed drive with a storage capacity of 533,248 bytes per drive. Each 8050 diskette has 77 tracks, and is read/write compatible with the model 8250 disk drive. This compatibility is limited to one side of the diskette.

LIKE NEW PRICED AT.\$490.00 \$225 (U.S.)
USED or REHABS FROM \$175 now available
ADD \$16.95 SHIPPING (U.S.)



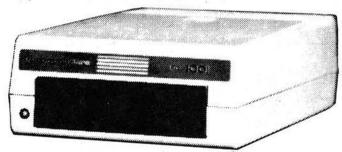
REHABS PRICED AT.\$495.00 \$299 (U.S.) ADD \$15.95 SHIPPING (U.S.)

#### D9060 & D9090 Hard Disk Drive

The two models of hard disk units are the 5¼" single-drive non-removable "Winchester" technology storage devices. The D9060 and D9090 units feature two or three platters with recording surfaces on both sides and provide respectively 5.0 or 7.5 million characters of storage. A single random access file may occupy the entire capacity of either unit. An IEEE Interface connector is located on the back of the drive. Near the lower edge of the rear panel is a "slow blow" fuse, and an AC power cord.

## SFD 1001 1 Megabyte Drive double sided 8250 format IEEE interface

N.W. Music now offers a constructive upgrade for the SFD-1001+ increasing its function and versatility. This modification allows the user to operate in a true single drive 8050 mode. This eliminates the previous problem of loading most 8050 software. This upgrade is only \$19.95 over the base SFD price. This modification allows the user to select, by switch, which mode they desire to operate during power down. The user will stay in this mode until power down and switch reversal.



PRICED AT \$125 (U.S.) ADD \$10.45 SHIPPING (U.S.) PRICED AT \$149 (U.S.) SFD with 8050 switch ADD \$10.45 SHIPPING (U.S.)



404 Inverrary Lane — Deerfield, IL 60015 Hours— Voice Phone: 708/808-7000 Mon.-Thurs. 12:30-5:00, Sat. 12:00-4:00 Super Office SALE PRICE R OFFICE **ALL THE GREAT FEATURES** OF SUPERSCRIPT II AND SUPERBASE INTEGRATED IN ONE FANTASTIC PACKAGE

Store important data then print out personalized custom reports inserting totals and names in the proper places. Do invoices, past due notices and many other things with Super Office. With Super Office you can do anything a small business needs.

Super Office is the ultimate in integrated programs for the "B" series market. Some features include left and right margin settings, tabs, decimal alignment, right justification, underlining, bold print, page numbering and a whole lot more. Super Office is easy to use with simple function key commands and an easy to use manual. There is even a spelling checker to keep you from making embarrassing spelling mistakes. We challenge you to find an easier integrated program or one with more features than Super Office.

Includes the ultimate data base at an affordable price. You can do anything that requires data storage with Super Office. Simply set up your screens for easy entry of information (up to 4 screens). Then set up the way you'd like the information to be printed. Super Office does the rest! This program has full calculation capabilities and full data storage manipulation. You do not have to reload either program to access the other. Automated merging through the Super Office application generator.

\* Purchase subject to signed disclaimer. (must have 256K-1 Meg. upgrade to operate)

TAKE A LOOK AT THESE GREAT SUPER OFFICE FEATURES

Calculation Capabilities connersed to Calculation Better ihan dbase II concerning list Sales record Home Budget · Help Screens Highlighting rev Drender ICUIATION LA Data Entry Screens per primites Document Chaining Built-in Programming language. Jer definable screen formats Up to 15 files per Database Up to 127 Fields Der Record Report Generator Keyed Access

#### IF YOU VALUE YOUR TIME, THEN IT'S TIME TO BUY SUPER OFFICE **NWM Rebate Plan**

Super Office is shipped with the Superscript II, Superbase I and Super Office Insert

Buy one of our expanded B-256 computers and purchase Super Office for only:

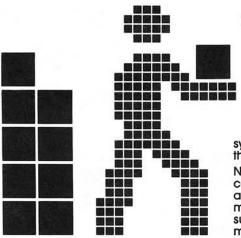
\$19.95 with SBI and SSII Manuals

\$9.95 without SBI and SSII Manuals

Without B-256 Purchase: \$29.95 with SBI and SSII Manuals \$19.95 without SBI and SSII Manuals

NODIH/NE

404 Inverrary Lane — Deerfield, IL 60015 Voice Phone: 708/808-7000 Hours-Mon.-Thurs. 12:30-5:00, Sat. 12:00-4:00



### NWM'S INVENTORY CONTROL SYSTEM" VERSION 1.3

This system was developed by a user for users. It seems that most systems are developed by computer engineers that never see or use the product when finished.

NWM, inc. chose the toughest software analyst we could find to give a complete and unbiased review. Bob Loefler is the gentleman that tore apart the CABS Accounting System and documented all the bugs in most of the modules. To have someone of this caliber make suggestions means better, more efficient software available for CBUG members.

- Loads program modules in less than 8 seconds (superbase 2) to main menus in 3 seconds or less
- On screen pop-up calculator in transaction modules
- Most data centered functions use the calculator keypad
- Versatile report features allow for 3 ways to print the same report. User selects the fastest method
- Built in sophisticated export program allows for complete packing of the database
- Type ahead feature allowed
- You can display reports on screen
- Access to superbase menu for user developed applications
- Partial-match key search now allowed in transaction modules
- User can search forward and backward through file while in transaction modules
- Elimination of most tiresome prompts for faster movements between subfunctions and menus
- Simplification of entering prices and costs that have not changed when entering transactions
- User programmable calculator allows you to turn the calculator function on or off within the transaction modules. If the user does not need the calculator, it saves time by eliminating the prompt and bypasses the calculator function

# NWM, inc. proudly presents Inventory Control 2.0 w/dual key indexing only \$19.95

#### Listen to how NWM has improved this already great Inventory Control System...

- Dual indexing (allows user to select record by item or stock number)
- New records can be entered in issues, receipts and orders modules
- Price list report (w/o cost for customer viewing)
- Sales report (sales history by item per month for 12 months)
- Cost summary (calculates total cost for a category of items selected)
- Configuration module (allows user friendly configuration of printers, drives etc.)

#### WE SUPPORT OUR CUSTOMERS!

**NWM Inventory Control System Version 1.3 Prices** 

B Version 1 8050 ...... \$9.95 B-128 Version

B-128 Version 1&2 8050 ... \$19.95

B Version 2 8050 ...... \$9.95

U.S. shipping and handling charge \$3.95 (Prepaid)

NWM, Inc. • 404 Inverrary Lane • Deerfield, IL 60015

(708) 808-7000 Hours— (Voice) Mon.-Thur. 12:30-5:00, Sat. 12:00-4:00 (24 Hour Order Recorder)

Superbase is a registered trademark of Precidion Software.

## **Subscription Application**

Yes

I would like to continue receiving Northwest Computer News, to get the best information on software, hardware and new developments for the CBM B, 8000 and 9000 series. Enclosed is a check for \$14 for a one year subscription.

Mail to: Northwest Music Center, Inc. 404 Inverrary Lane Deerfield, Il 60015

55190	y Name
First Na	me Last Name
Address	
City	State Zip Country
Business	phone Home Phone
Which of the Superscript II CABS Account What kind	Information:  the following software packages do you use on a regular basis? Check all that apply.  Superscript III Superbase Superbase 2 SuperOffice Calc Result String JCL Workshop Harrison's Assembler BeeLine Bterm Word Result of articles would you like to see published in Northwest Computer News?
note that volum	elp others on hardware and software questions, please enter the appropriate information below. Callers, please ateers won't accept collect calls and callers shouldn't take advantage of the helpers generosity.  Hardware
Days and Tin	nes Phone number Time Zone
No	I decline to subscribe at this time but would like to stay on your mailing list for product information on either Commodore or IBM Compatible Products.
No	I would like to be removed from your mailing list.  First name Last name Address City State Zip  If you have sold your equipment please forward this mailing to the new owner.