OS-9 Newsletter ©

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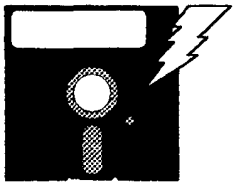


Disk Crash

Why? And what can you do about it!

Basics by Dave Gantz

There are 4 primary parts to a system disk. The **OS9Boot file**, the **bootstrap on track 34**, the **SHELL module** and the **GRFDRV module** located in the CMDS directory. If any one of these gets damaged (sufficently if not totally trashed) then the disk will not boot. However the way it looks when it comes up on the screen will often point to the source of the trouble especially if your boot contains a 40 or 80 column TERM.

If the disk just flashes the screen quickly when you type DOS then most likely your bootstrap file is trashed (the bootstrap is what IBM'ers would consider a hidden file since it is on the disk but there is no visible entry in the directory). If it comes up with the old 32x16 VDG screen with **OS9 Boot** displayed then track 34 is ok.

Now we should look to see how far it is getting with loading the OS9Boot file. This is where it is helpful to have the 40 or 80 column TERM. If it gets far enough to display the copyright info. in 40 or 80 columns then the **OS9Boot** file is most likely ok and we can look at the **shell** and **grfdrv** modules. Guess I should note, just to be as complete as possible, that the **startup** file, **SYS** and **DEFS** directories are all optional and you should be able to boot without them. If its not getting to the 40 or 80 column screen then the **OS9Boot** file itself is probably damaged, which means that it will boot to an extent but not get to the 40 or 80 column screen at all, and display the FAILED message on the original 32x16 screen.

Now you should have some idea of where to look for the specific problem. Here are some ideas on how to fix each: *(In all cases you will have to be under OS9 to do so)*

If the problem is with the track 34 bootstrap then the quickest, easiest way to fix (assuming you have enough free contiguous sectors on the disk to do so) is to use Burke & Burke's **EZGEN** utility to rewrite the bootfile, when you exit **EZGEN**

Cont'd next page

Attn: OS9 Underground subscribers

There have been several complaints posted on Bulletin Boards recently about subscription problems with the *OS9 Underground*. The editor/publisher, Alan Sheltra, has indicated that there were some problems with the incorporation of the *68XXX Magazine* with the *OS9 Underground*, due primarily to incomplete records being sent to him from the *68XXX Magazine* publisher. Apparently those problems have been resolved and putting together the latest issue is well underway.

The October-November issue is behind schedule currently but will be worth waiting for. However, if you have not received your September-October issue of the *OS9 Underground* then you should phone, write, or otherwise contact Alan at the below listed address.

OS-9 Underground
4650 Cahuenga Blvd. Suite #7
Toluca Lake, CA 91602
(818) 761-4135

CoCo/OS9 publications, such as the *OS-9 Newsletter*, *OS9 Underground* and *The Rainbow* need your support and sometimes your patient understanding.

-- Rodger Alexander, *OS-9 Newsletter* Editor --

<< In this Issue >>

fixing that problem, of course you can **cobbler** the disk, but that takes the boot files and kernal from memory to create a new bootfile and if they are not identical to the ones that are on the disk, then you may get a good disk, but loose some stuff too, so cobbler is not recommended for repair work. Another route would be to use **OS9GEN** to create a new disk using the old disk's **OS9Boot** file as a source.

If the problem is the **OS9Boot** file itself, I've used a utility called **dEd** to repair the damaged module(s) within the OS9Boot file without moving or changing the size of the boot file. I **"DED /Dn/OS9Boot"** then *Link* to the bad module(s) and use the *Verify* option to verify the modules CRC which sometimes gets scrambled even though the rest of the module is actually intact. The same technique can be used with the **shell** and/or **grfdrv** modules. To determine which modules are bad in the **OS9Boot** file or the **shell** or **grfdrv** modules in the CMDS directory, just use the ident command:

Ident -s /dn/OS9Boot
or
Ident -s /dn/cmds/shell
or
Ident -s /dn/cmds/grfdrv

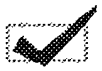
Look for a **?** in the 4th column instead of a period, also have your speaker volume turned up because if a truly bad module is found the terminal bell will beep too.

Couple more things. If you cannot read the disks root directory from OS9 then the disk is considered trashed and usually unrecoverable. Usually I'll get an error #253 when trying to get a directory of the root directory, and the disk will not boot. Other possible errors and definitions:

ERROR #	Meaning
253	**Non Sharable file (or in some cases just a trashed disk)**
249	**Wrong type (usually an RSDos disk or one that is too large)**
247	**Seek Error (system can't find a sector that should be there)**
244	**Read Error (found sector but can't read it)**
243	**CRC Error (The CRC doesn't match that which was recorded)**
213	**NON Existing Segment (Damaged file structure)**

These are the errors I've encountoured on the root directories (as well as sub directories) of un-recoverable disks.

--Dave Gantz;FidoNET,OS9 Echo--

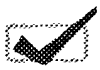


Advance Solution by Gene Krenciglowa

I had this finally happen, much to my alarm, where *Dir* or *Free* would fail, but the track 0 was readable, just a few key sectors were garbaged. **dEd3** was able to read track 0. Logical Sector Number (**LSN**) 0 was garbaged along with a few other root directory sectors. First, reconstruct LSN 0 as much as possible from viewing, with **ded,** the contents of a good disk, then move on to the actual root directory. If there is not much left of the root directory, then try scanning the disk, with the *find* command in **ded**, for file descriptor sectors and rewriting the root directory with the information from any file descriptor sectors located.

Form a byte sequence from likely file attributes (FD.ATT) and owner user ID (FD.OWN) which are the first three bytes of a file descriptor sector. One such byte sequence is $0b0000 for attributes ----r-wr and owner $0000. A sector beginning with such a byte sequence may be a file descriptor sector, and so the detective work continues by looking at the file segment list and so on. If you cannot read the disk's root directory on track 0 with **ded** or similar disk editor, then a recovery may be doomed or not worth the effort.

-- Gene Krenciglowa;FidoNET, OS9 Echo --



Step by Step by Dave Kelly

I spent an hour reconstructing a disk last night. To help overcome the fear I encountered several years ago when I had to do this, I thought I would show what I did.

When I did a *dir* on the disk the last line looked like this:

butt15.c butt16.c - -
ERROR 213

Several files were missing. So I got out the Tech Manual and **dEd** and proceded to scan through the directory. I found a sector that looked like this:

```
0  62 75 74 74 32 31 2E E3 00 00 00 00 00 00 00 00
1  00 00 00 00 00 00 00 00 00 00 00 00 00 00 02 0B
2  FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
3  FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
4  FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
5  FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
6  62 75 74 74 32 34 2E E3 00 00 00 00 00 00 00 00
7  00 00 00 00 00 00 00 00 00 00 00 00 00 00 02 0E
8  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
9  00 00 and so on.
```

The FF's are the garbage. The first two lines read like this:

```
62 75 74 74 32 31 2E E3 00 00 etc
b  u  t  t  2  1  .  c
```

```
00 00 00 02 0B <---------- go to sector for file descriptor
```

Note that E3 does not equal "c" but instead is "c" + 128 (or the Hex value of "c" [63] + Hex equivalent of 128 [80] which equals E3 which represents EOF (End of File))

Lines 2 thru 5 should contain information on 2 files. I looked at sector $020B to confirm the existance of a file descriptor header. It was there. Where are the other files? I was lucky this time, the headers exist at sectors $20C and $20D.

I added a name, using hex numbers and adding $80 to the last letter to lines 2 and 4. Then I entered the $02 0C to the end of line 3 and $02 0D to the end of line 5.

I then examined the file descriptor headers. The file at $20C was intact. The one at $20D was not. It did not have the number of bytes to load, 4 bytes starting at $09- FD.SIZ. *To find out what the four bytes should be you need to look at the beginning of the actual file.* The five bytes starting at $10 tell where the file starts (example: 00 03 FE 00 08). I went to sector $3FE and counted the sectors times $FF plus the bytes in the last sector. I then entered the numbers starting at sectors $09 of the file descriptor header.

```
Example: sector 09 0A 0B 0C 0D 0E 0F
                00 00 07 03
```

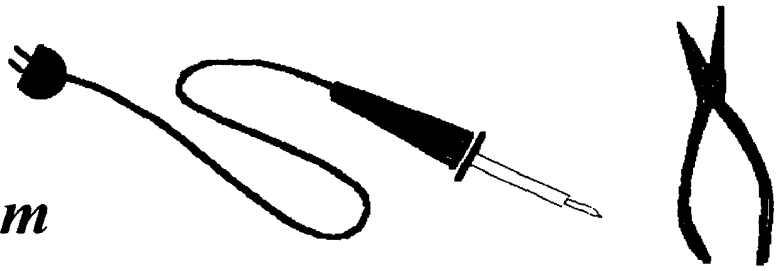
```
255 X 7 + 10 = 1795      $FF X $7 + $A = $703
```

Always think in HEX numbers

Its not all that hard, just frightening the first time. Just read the Tech Reference section 5 of your OS-9 Manual and ask questions. And always remember to reconstruct the file before any data is written to the disk.

-- Dave Kelly;FidoNET, OS9 Echo --
-- OS9 Community Network, Region 19 Coordinator --

A Better "HACK" to fix the RS-232 IRQ bug problem



This fix replaces previous "hacks" to use the hardware interupt provided by the Tandy RS232 Pak, instead of getting it after it circles the entire computer.

The original fix has you tie all pin 8's on the Multipak together, then, on the RS232 Pak, cut the jumper wire, next to the rompak connector, which connects the 6551 IRQ line to pin 8 of the RS232 Pack Rompak connector. Then run a wire from the 6551 side of the open jumper to pin 3 (IRQ line) of the 6809, by catching the pad where the front of R2 is soldered to the top of the board. That fix seems to work fine, but creates the necessity for a wire, running from the Multipak to the CoCo.

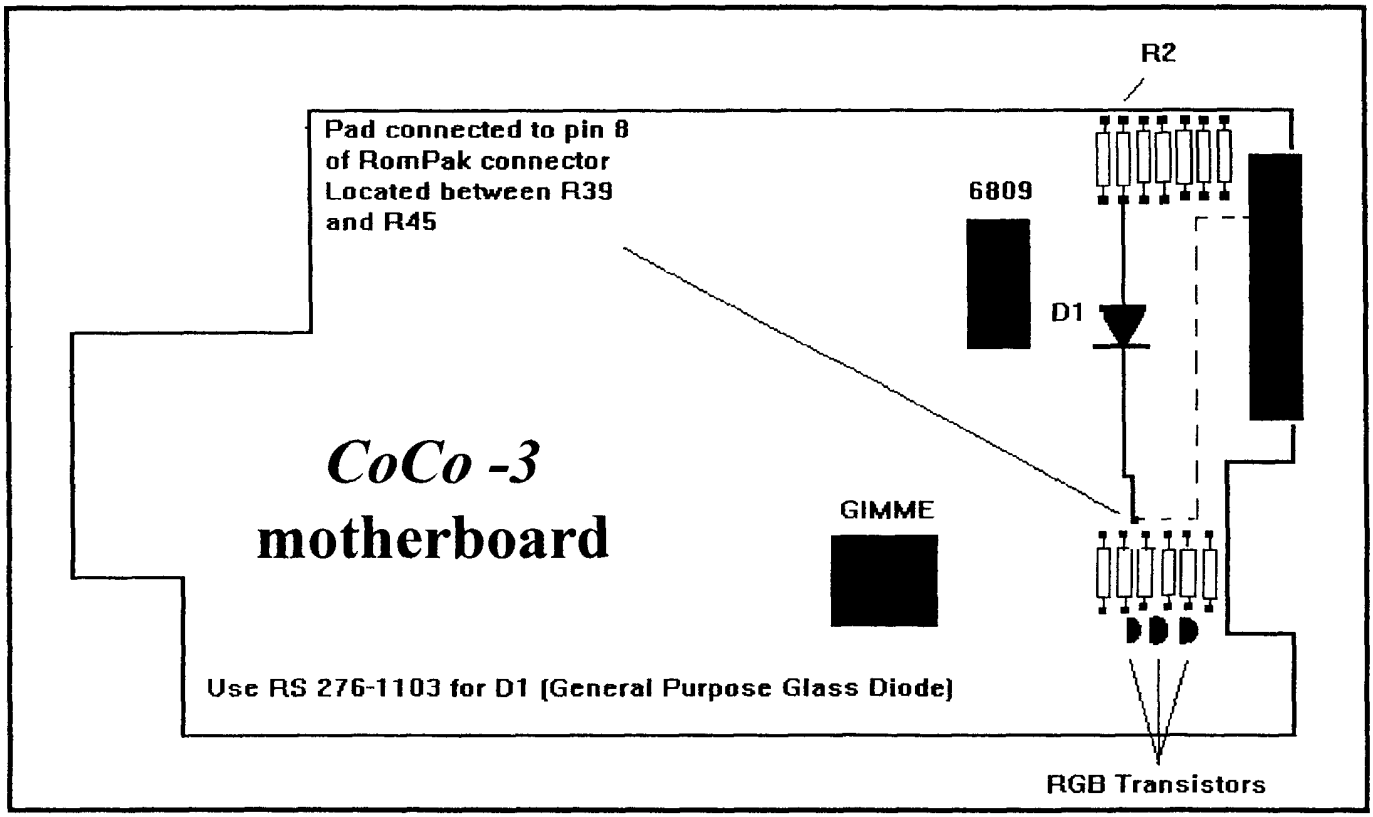
This fix uses a general purpose glass diode 1N914, or Radio Shack RS 26-1103, to couple the interupt signal from pin 8, of the rompak connector, to pin 3 of the 6809. It is all done inside the CoCo, without the need for any external wires. The only catch is that if you have made the earlier fix, you must reconnect the jumper, on the RS232 pack, back to the original position, so that the interupt sent by the 6551 gets to pin 8 of the edge connector.

Pin 8, on the edge connector, on the CoCo III, is hard to get to, as the foil runs on the bottom of the board, but there is a pad on the top of the board, located between resisters R39 and R45.

Refer to the diagram below for the location of the pad, and the direction of the diode. The cathode of the diode must go to pin 8, as the IRQ is a negative going pulse.

Note: It is still necessary to tie all the pin 8's of the multipak together, because of the design of the Multipak, switching between slots (which is done a lot during use of the ACIA, Disk drive, and Hard drive) causes interupts to be lost.

-- Eddy Cardone:Delphi:OS9 Sig --



Editor's Note: *There has just been released into the Public Domain a file called* **CLOCK60HZ.AR**. *Includes replacement clock drivers for the Tandy's 60Hz Clock driver and Disto and B&B clock drivers that eliminates the need for any hacking!*

CoCo Lan Networking

Network CoCo's all over the place

With OS-9 you can run extra terminals from your main CoCo and still work on it too (no dedicating one machine as a file server). To start with you need another terminal, I originally used my old CoCo I, the gray dinosaur. Now I use a newer CoCo III with 80 columns. To use the CoCo III, I needed a terminal emulation program. Trying to be cheap so I didn't have to buy a disk controller to use my second drive with my CoCo III, I initially used CC Talk from the November 1984 issue of Rainbow, but switched to MikeyTerm so I could use 80 columns. I copied the MikeyTerm to cassette so I now had a cassette driven terminal package. All I needed now was a cable.

I built two cables for the fun of it, one using 25 ft of speaker wire and the other using standard phone line and modular jacks. The cable for the speaker wire was built as shown in Table 1. To connect to the RS-232 Pak you need a male RS-232 plug (Cat No. 276: 1574).

RS-232 "null" Modem Cable (Table 1)

RS-232 Pak		RS-cable	
pin 2 data out		pin 2 data in	(green)
pin 3 data in		pin 4 data out	(white)
jump pins 4 & 5 (RTS,CTS)		none	
pin 7		pin 3 ground	(red)
jump pins 8 & 20 (CD,DTR)		pin 1 carrier detect	(yellow

RTS - Request To Send, CTS - Clear To Send
CD - Carrier Detect, DTR - Data Terminal Ready

The phone line cabling is what I really wanted; since, I could build two short cables that could be connected by phone lines, eliminating the bulky cabling normally required for cables longer than a few feet. The phone lines initially gave me a lot of trouble because the lines are switched as follows:

Box 1	Box 2
black	yellow
red	green
green	red
yellow	black

This made building the connector real fun. Your phone lines should be the same as what I've listed above unless the phone company is really trying to confuse us.

Now to make the cable, you'll need a male RS-232 connector with cover to look nice (Cat No. 276-1549B); a four pin male connector, just like the printer cable for the CoCo; and two Quick-Connect Modular Jacks (Cat No 279-355). All of the parts should be available at your local Radio Shack. Now connect everything up as detailed in the Table at the end of the article.

This will allow you now to connect the two computers with any length of phone line that you have available and makes for a neat set-up. Just think, you have one of those small laptop computers, with a terminal package and a RS-232 port on it, you could connect phone jacks all through the house anand just plug your cable with the RS-232 head and Modular jack into a phone line, plug the phone line into your CoCo jack in the wall and you have access to your main-"frame" CoCo anywhere in the house. Keep your recipes in a database, put your old CoCo in the kitchen, plug it into the phone jack you installed in the kitchen, and you can access the main-"frame" CoCo. The only drawbacks I've noticed so far is you don't get graphics emulation or Multi-Vue from your terminals (maybe a good communications package could solve that, but MikeyTerm works great for my needs).

If you get lost with the connectors just build a simple continuity checker, I built one with a 330 ohm resistor, a LED, and about 15" of wire along with two 1 1/2 volt C batteries for power. Tape one end of the wire to the negative side of the battery, connect the other to the resistor side of the LED, touch the other side of the LED to your positive side of your batteries to make sure everything works. If it doesn't light, check your connections. If it still doesn't light then try turning your LED around.

Once I had the hardware built, all I had to build was the password file in **/dd/sys**, start the TSMON command with the LOGIN command in memory, and away we go. I used the following shell script to set everything up:

```
load /dd/cmds/login
    onerr goto errtrap
    echo [1] Bit Banger  - /t1
    echo [2] Use Modem   - /t2
    echo [3] Use RS232 Pak - /t3
    prompt Enter Choice:
    var.9
    if %9=1
      echo Starting Bit Banger Port for Terminal IO
      xmode /t1 bau=1 pag=13 eko=1 upc=0 par=1
      nice 25 /usr/cmds/tsmon /t1&
    else
    if %9=2
      echo Starting Modem Port for Terminal IO
      xmode /t2 bau=4 par=1 pag=13 eko=1 upc=0
      nice 75 /dd/cmds/tsmon /t2&
    else
    if %9=3
      echo Starting RS232 Port for Terminal IO
      xmode /t3 bau=1 par=1 pag=13 eko=1 upc=0
      nice 75 /dd/cmds/tsmon /t3&
    else
      echo "Invalid Selection"
    endif
    clrif
    goto +finis
    *errtrap
    echo An error %* occurred, check device status.
    *finis
```

(Note I used the xmode from the SACIA patch).

Once you've started this process load MikeyTerm or some other com package into your other computer, hit the return key and you will get a login prompt. Log in and you now have a multi-user system.

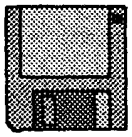
I'm constantly amazed with the power of this machine, at work I use a VAX 8200 under VMS, an AT&T under Xenix and (yech!) a Z-150 under (bigger yech!) MS-Dos. The CoCo compares with the VAX and the AT&T (a little slower), but really outshines the MS-Dog machine.

Table 2

RS-232 Pak	Box 1	Box 2	RS-cable	
pin 2 data out	green	red	pin 2 data in	(green)
pin 3 data in	red	green	pin 4 data out	(white)
jump pins 4 & 5	none	none	none	
pin 7	black	yellow	pin 3 ground	(red)
jump pins 8 & 20	yellow	black	pin 1 carrier detect	(yellow)

One final note: I've since downloaded the uucp tools and I have e-mail capability between my two machines now. Good luck setting up your CoCo LAN.

--Ed C.;Delphi:OS9 Sig --



Bellingham OS-9 Users Group

Public Domain Library

*This is an **UPDATE** list of files that have been added since the August '92 listing.*

Applications Public Domain Disk 1

Catalog	Catalogs disk files for easy reference
Clyde_v2	Annimated graphics display for use as a screen saver

Graphics Public Domain Disk 3

Pubfonts	More Home Publisher fonts converted from "Graphicom-Part III". Basic font converter included in package.

Miscellaneous Public Domain Disk 1

X10Contrl	OS9 Software to control the PC version X10 Appliance Controller (req. RS-232 Pak)

Multivue Public Domain Disk 1

Tetris	UNIX version (non graphics) with color and sound added
Cmdgen	Creates module that executes other module(s)
GradeMaster	Grade tracking program for students
GIndex	Rolodex application for MultiVue
GsortV9	Latest version with all bugs removed
GCal1.1	New, fancier replacement for MultiVue Calendar

Patches Public Domain Disk 2

Rename	IPatch to permit full path names in second descriptor. Wordprocessors will be able to properly save temp files with patch.
Vemac	Patch to improve operation of help options in VED editor
Scfed2	Kevin Darlings Patch to SCF system module to enhance the keyboard buffer
OS9p3	Boot module that will PRINTERR message when and error occurs

Programming Public Domain Disk 3

Guilib10	Graphical User Interface C library by James Delaney & Daniel Hauck
C_env	Mouse driven front end for the microware® C-Compiler
GFX3	Enhanced graphics module for Basic09 written in C
CARRAY	Corrects C-Compiler bug in which multidimension arrays are partitioned

SoundMusic Public Domain Disk 1

Play5	Newest PLAY module

Telecommunications Public Domain Disk 3

Adqwk30	Offline message reader
Supercom22	Newest version of Supercom terminal program

Utility Public Domain Disk 7

Junk	Saves deleted files to a "JUNK" directory. (Smart Erase)
Stream	Hard Drive backup utility version 1.1
Trxmon	*TSMon, Password, Login, NewUser* improved replacements
Mdir4	OSK type *mdir* with search and type options
Direct	Simple Directory Copy utility.
AR1.5b	Newest **AR**chive utility

Software Review

by Alan DeKok

NitrOS9

Well, I finally got a copy of NitrOS9, and installed it on my system last night. After about an hour of fiddling in order to get a boot disk with modules that it liked (floppy systems....), it took roughly 20 minutes for the whole installation to go. Then I re-booted and rooted around to see what neat new toys I had.

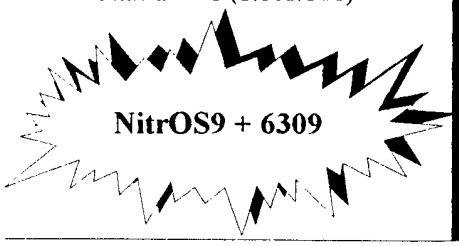
It includes: most bug fixes (I didn't check for "all" of them), 80x25 windows, enhanced *grfdrv*, and MUCH faster screen updates. If you ever had reason to complain about the slowness of OS9 screens, (and have NitrOS9) then SHUT UP! It's not a problem anymore <grin>. Scrolling was about 35% faster, and things like *PROC* and *PMAP* just went **foom** onto the screen, whereas before you could actually see them print out the individual numbers and lines.

I tried out a bunch of programs, and everything seems to work the same as before. The documentations included are quite straightforward and idiot proof (heck, even I understood them). If you can make a new boot disk, installing this package is not much more complicated than that.

The only thing I didn't like, was some programs (games) expect a (40/80) by 24 screen, and the patches gave a (40/80)x25. This resulted in an extra line of junk at the bottom of the screen, but this would happen anytime you extended the screen, and there's not much you can do about it.

Soooo... I'm satisfied. It works, it didn't crash on me, and it's FAST. Exactly what I was looking for!

-- Alan DeKok;FidoNET,OS9 Echo --
Origin: Micro80 Computer Club of Ottawa BBS (1:163/306)



OSK How many platforms are there?

First thing, I am not a "programmer", yet. I am more the hardware type, but am trying to learn C. I am writing this as personal opinion only and I hope it doesn't offend anyone. Anyway, on with the show.....

After working in television for 13 years, I've decided to start my own video, audio, computer services company. I will use a couple 486 computers for voice mail and some other things. But it's the audio/video computers that are causing me to have brain spasms. I can't afford a Cray, Silicon Graphics or Sun(yet!) so I'm looking at the Amiga-4000, the Atari Falcon030 and the FHL Kix/30.

Now as I understand it, the Kix/30 is Microware 68k compatible "right out of the box". From all the stuff I've read about the others (A LOT!) there was a "rumor" that the latest version (2.4?) of OSK was being ported to the Atari Falcon. And according to the Amiga literature the CPU in the 4000 is "Motorola 68040 compatible".

Now I was thinking (dangerous habit--don't try it unless you are willing to accept the consequences!) if all the folk that had a hand in the OS9-LV2 upgrade could convince Microware to port OSK over to the Amiga_4000 and the Atari Falcon030, Microware along with it's programmers could grab a share of an international market. Think about it. For the first time (that I can remember) computers that already have a market, hardware wise (Ataris, Amigas) are closer to being able to run OSK "at power up" than ever before. With the expertise that some of you have with OS9/K, combined with the hardware of these new machines (browse the Amiga and Atari forums and read the specs on the Amiga_4000 and Falcon030), things could get interesting in the home computer market. Think about it. With Big Blue on the way out/down, there will be a gap that needs to be filled.

There are some die hard CoCo OS9'ers out there (like myself) that don't really want to give up OS9, but want more computing power. But before I spend $2600 or $3000 on a new computer system, I want to know that I will have hardware support! And with these new machines being released WITH FCC Class B, if I can run OSK on either of them I might be tempted to BUY more than one. And it sure would be nice to be able to run programs on either.

Again, I am not a programmer, BUT if I were, I would think long and hard about this one. After all, are you programming just to make other people happy; or to make money, make yourself happy, and then make other people happy, in that order? These thoughts, ramblings and stuff are my own opinions. I hope I do not offend anyone. But I was just thinking about how home computers have changed and have become business/home computers. The CPUs have been narrowed down to basically two (68xxxs and 386/486s). Operating Systems have been narrowed down to a few (Dos, OS/2, U*ix). OSK has a place in there. Especially since the new hardware is being designed to integrate audio, video and voice recognition. OSK should fit quite well in that type of hardware environment.

This could be the OSK opportunity of a lifetime.

-- Michael Kearney;Delphi,OS9 Sig --

At Last.....!

FidoNET OS-9 is in SEATTLE

CALL

TOP HAT BBS

244-9661

Go to the Message Menu and Select OS9 or PNW echos

On the OS9 echo you'll be reading 20-30 messages daily about your favorite subject and you're invited to reply to anyone's message.

On the PNW echo you'll be reading 5-15 messages daily from "the guys" Dennis Mott, Donald Zimmerman, Rodger Alexander, Chris Johnson, Randy Kirschenmann, Steve Hammond, Dave Gantz and and others from around the Pacific Northwest. Maybe, someday.... even Terry Laraway??

If you need a terminal program, we'll even provide you with one for free? Just send $1 to cover the cost of the disk and postage and your address to:

Bellingham OS9 Users Group
3404 Illinois Lane, Bellingham 98226

PC to CoCo transfer

WEEKEND HARDWARE PROJECT

It finally happened. After 10 years of COCOing, with the last 4 or 5 of them in OS-9, I found myself one day with a 120 Meg HD, 8 Meg ram, 1 Meg SVGA, i486dx/33 MS-DOS system on my desk. And I had a small problem.

The problem: I had 3 Meg+ of text files on the COCO system that I didn't want to lose. The COCO was going to end up in the storage room. So I had to find some way to move those files to the MS-DOS system.

I considered uploading all the files to my workspace on DELPHI, but decided against it. DELPHI is a long distance call for me, and it would have cost a small fortune to transfer more than 6 Megs at 2400 baud. Since the two local BBSes shut down a while back I'd have the same problem if I tried to do the same thing with a regular BBS.

I tried using the PCDOS/OS-9 disk transfer program, but for some reason it didn't work quite right. Perhaps the format of DOS 5 disks is slightly different or something. I didn't know what was wrong, just that I still had to get the files moved before the wife ran out of patience.

So, it seemed like I only had two choices left: 1) Type everything over. <NOT a very pleasant idea!>, or 2) Hook the two computers together and go with computer to computer transfer.

I went for choice 2 and it went like this.

Step 1 Remove all control codes from the text files and change the names to something acceptable to MS-DOS. I did this with a BASIC09 program, and had it add the original filename as the first line of the file so later on I'd know what it was without looking through the whole thing.

Step 2 Move all the OS-9 files to the same directory to make it easier to find them once the transfer gets started. Another simple BASIC09 program took care of this.

Step 3 Get the hardware to interconnect the computers. I have a Disto SC-2 on the COCO and have been using /T2 to run the modem. That gave me a DB25 connection to work with on one end. The MS-DOS system has a DB25 connection as COM1, so I had DB25 connectors to work with on both ends. With a quick trip down to Radio Shack to pick up a null-modem adapter and a gender changer, about $5.00 each, I had the hardware I needed.

Step 4 Hook it all up. This is simple, as long as you've got enough room to get the two computers close to each other. I ended up with one sitting on top of the other, one monitor on the desk and one on a bookshelf, one keyboard on the desk and the other one in a drawer, and an extension cord running across the room. What a mess!

Step 5 Get the two computers to talk to each other. This ended up taking a little while. I tried using terminal programs on each end first. But they didn't want to transfer the files unless I used xmodem. What I ended up with was Procomm Plus on one side, and the OS-9 Shell on the other.

Step 6 Set the ports for the highest possible speed. This is actually a part of step 5, but since I ended up working from the Shell I had to do it again. The SC-2 is good up to 9600 baud, so that's what I set it for with XMODE /T2 BAUD=06. Alt-P in Procomm let me set for COM1 and 9600 baud.

Step 7 Test transfer a file to make sure everything is working. It was, but it wasn't. ASCII download in Procomm was working fine, but something about the COCO wasn't set up right. LIST TEXT001.TEX > /T2 kept on stalling after a few lines had been sent, and wouldn't continue until I hit a key on the other computer. A little hair pulling and a couple of cups of coffee later I realized what I needed was XMODE /T2 -PAUSE. What can I say, it was starting to get late.

Step 8 Transfer the files. I didn't want to sit at the computers and type filenames the whole time, so I left Procomm in the ASCII download mode, and had a simple BASIC09 program

transfer all the files, sending the name of each in a header line before it sent the file. Another simple program on the other end could split them back up later on.

Step 9. Clean up. Disconnect everything. Put the COCO and hardware in the storage room. Put everything back where it belongs (dust the desk first). Write & run the QBasic program to split the big file into smaller files.

Step 10 Finished.

Couple of more points:

When you've got a directory full of files to work with (like I had a few times here) an easy way to get all the file names in one place is to redirect an unformatted directory listing to a file (DIR -U > FILS). If the directory routine you're using won't give an unformatted listing you can still use it, just edit the file to remove the extra information.

The BASIC09 and QBASIC programs I used saved a considerable amount of time, and didn't take long to write. As an example, here's the listings for the programs used in steps 8 and 9. The other programs were just as simple, and just as helpful. (The filelist was called "fils". The ASCII download was called "os9stuff.txt")

This is the basic09 program used to handle files in step 8:

```
PROCEDURE lister
 DIM p1:INTEGER
 DIM nam:STRING
 OPEN #p1,"fils":READ
 WHILE NOT(EOF(#p1)) DO
   READ #p1,nam
   SHELL "echo START OF FILE "+nam+" > /t2"
   SHELL "list "+nam+" > /t2"
 ENDWHILE
 CLOSE #p1
 END
```

This is the QBASIC program used to split files apart again:

```
DIM nam AS STRING
DIM lin AS STRING
CLS
OPEN "os9stuff.txt" FOR INPUT AS #1
OPEN "junkfile.jnk" FOR OUTPUT AS #2
DO
LINE INPUT #1, lin
IF INSTR(lin, "START OF FILE") <> 1 THEN
 GOSUB samefile
ELSE
IF MID$(lin, LEN(lin) - 4, 1) = "." THEN
 GOSUB newfile
ELSE
 GOSUB samefile
END IF
END IF
LOOP UNTIL EOF(1)
CLOSE #1, #2
SHELL "del junkfile.jnk"
END

newfile:
nam = LTRIM$(MID$(lin, 14))
CLOSE #2
OPEN nam FOR OUTPUT AS #2
PRINT "Working on: "; nam
RETURN

samefile:
PRINT #2, lin
RETURN
```

Final note:

I'm absolutely certain that there's other ways of doing what I did. Better, sexier, more "professional" ways. Some of which you could probably go out and pay $200.00 for. But, THIS WORKED! And it'll work again when needed. That's why I'm posting it. If you need it, use it.

-- R.W. Kemper;Delphi, OS9 Sig --
23 Nov 92

re: Newsletter Format

I'm sure that most everyone was pleased by the magazine format that was used in last month's issue of the *OS-9 Newsletter*. It certainly was a classier appearance. However, it did present a problem.

The cost of having our local print shops photocopy and put together the newsletter in that format cost twice as much. Being of Scotch decent (or so I claim), I sought a cheaper way. I personally photocopied the masters and put them together myself. A labor of love I admit, but also very time consuming. Just to put together 40 copies took an hour. And we are growing with five more subscriptions in just the past two weeks.

It takes about 20 hours per month to gather, edit, organize, paste and screen format the Newsletter. At that point I want to be done with it. Often the Newsletter is completed by the 1st of the month and then sits there in a heap for several days waiting for me to run off the mail labels, and then to stamp and dump them in the mail box. Such a simple task and yet I find that so difficult to do.

What this all is leading up to (if you haven't figured it out already) is the return to the original format to save the extra labor and cost. Perhaps in the furture we'll try the magazine format again. But in the mean time....

If you would like to contribute your talents to our Newsletter, PLEASE feel free to contact me. We appreciate submissions of articles that can be shared with our readers, and it makes my job easier too.

Rodger Alexander, Editor-Publisher
OS-9 Newsletter, 3404 Illinois Lane, Bellingham WA 98226
Delphi: User name "SALZARD"
FidoNET: OS9 and PNW echoes(1:3401/301)

Club Activities Report

Bellingham OS9 Users Group - Longview/Kelso CoCo Club
Mt. Rainier CoCo Club - Port O'CoCo Club - Seattle 68xxx Mug

Bellingham OS-9 Users Group

Our monthly meetings are normally scheduled on the 4th Wednesday of each month. However, considering the Thanksgiving Holiday, we moved our meeting to the 24th and then canceled it altogether. But despite the cancellation of our regular meeting, we still had a couple of "mini" meetings in which we did our video taping of the 6309 installation and a GIMIX maintenance meeting .

On November 4th we had a small meeting to review the recent attainment of the original System and Application master disks. We found one of the OS-9 Level Two Master disk had gone bad, but everything else seemed to be OK. The **Sculptor** database disk was still sealed. But there are still some master disk missing. We found copies of the **Introl C-Compiler**, but not even a backup of the **Microware C-Compiler**. It was interesting to see that Microware sold the **ASM**bler and **EDIT** as a separate package from the **OS-9 System**. We found at least 3 separate print spoolers and a program called **DO** which was a batch or script file processor. If this qualifies as "vapor ware" we may include it in our PD Library.

Since the GIMIX system is now being used by students to play games, word processing, multiple choice testing and learning "C", a greater familiarization of the security system is needed. **Wes Payne** has been working on completing his *ZIPS* applications. This makes logging in on the GIMIX more like logging on to a Bulletin Board over your telephone modem. Each user is routed through a tracer program that checks each individual's status and permissible access to the computer to a much greater extent then just the standard file and directory attributes that OS9 normally provides. Even the activity of the logged on user is kept in a special data file for viewing by the "Super User" at a later time.

Our second mini meeting was a video tape session with myself and **Craig DuBois** our club "camera man". We had earlier attempted to video tape this session several months ago but Craig's video camera was not working properly. Craig borrowed a new Motorola video camera from a friend at work which was more sensitive to lower lights and had better color and the macro zoom seemed to have a greater depth of field.

To make a long story short, the taping went quite smoothly with super close ups making the "piggy back" mounting of the 6309 obvious and straight forward. We did have some problems with the new camera clipping the first word of each scene so we will edit some of the audio portions of the tape to correct those problems.

We displayed B&B's ***Booster*** software installation at the end of the tape and perhaps later (if I get my Xmas present) we will be able to include the installation of ***NitrOS9***. *(See review in this issue)*

As a final step, we showed the un-edited video tape at the Seattle 68xxx meeting for critique. Other than a criticism that I turned the wire wrap tool the wrong direction (huh?), everyone seemed to think it was a pretty good tape.

-- Rodger Alexander --

*The **Bellingham OS-9 Users Group** meets at Fairhaven Middle School, 110 Parkridge Rd., Bellingham, WA, on the 4th Wednesday of each month at 7:00 p.m. Call (206) 734-5806 for more information.*

Port O CoCo Club

November was a cool, rainy night. Only a small group of brave souls came together to share in the glow of talking and learning about the CoCo. We started the meeting with a little housework.

All the CoCo users of Washington have been honored by Mid Iowa & Country CoCo's disk based magazine "Upgrade National Diskletter." The November issue opens with a CoCo version of the 1989 stamp of Washington. Also our most fanatical CoCo supporter, **Terry Laraway**, was honored with his name beside the stamp. Well, deserved, Terry! The diskletter is only $12 annual from Terry Simons, 1328 48th, Des Moines IA 50311. Phone 515-279-2576.

Russ Griggs had been part of Port O'CoCo during it's formative years. Last week we learned that he had suffered a stroke some time before and is working his way back to health. We sent him a card from the group. On the lighter side, **Les Bulyar** (one of our OS-9 heavy-weights) accepted a free pass to South Sound Cinema for becoming a year older in November. In fact, the day of the meeting was actually his birthday! That's commitment.

We also looked at the actual State of Washington document stating that we had become a non profit organization. We were incorporated on October 20, 1992.

We also read a letter from one of our former members. **Dan Statham** is now in West Monroe, Louisiana. Not only

has he moved away, he has changed his platform. He's now DOS based so he has his complete CoCo system, software and books available. If anyone is interested, he may be reached at 241 Blanchard #5203, West Monroe LA 71291-7385. Phone (318) 324-8656. His list of stuff is 3 1/2 pages long.

Another piece of information was a monthly magazine devoted to the TRS-DOS machines (Radio Shack Model I, III, IV et.al). ***Computer News 80*** has a lot of information, hardware and software for those machine. If you or anyone you know could benefit the address is Post Office Box 680, Casper WY 82602-0680. It's a 48 page monthly offering for only $24 annually.

Lastly, the great news for those of you who have not purchased a color monitor yet. Radio Shack is closing out the CM-8s at only $49.95. These monitors were originally $300. They are hard to find, but well worth the search! For an additional $45 you can get a three year service contract for them.

Our first presentation of the evening was by **Gene Elliott**. He is our "Tower of Power" builder. He has all the drives installed. He has all the plugs on the back of the CoCo 3 case wired out the back of the tower. He has the numeric display spelling "CO" and plans to cut the plate larger so he can add an additional display so that it will read, "COCO." He is going to use the turbo switch for switching in and out of the hi-res mode for the joy stick. He is toying with the idea of creating a slot on the top or the back so RomPaks can still be used.

The wildest idea of all, though, is going to be installed in his own tower. He has learned of a defunked Video8 camcorder. He is exploring the idea of mounting the 1 inch monitor into the face of his tower with the eye piece. Thus he could "look into the tower" to see the video display from his CoCo. Now, that's not all. If he can swing it he may mount the Video8 transport mechanism into one of the drive slots so he can tape all the information generated by the computer!!!

The case Gene is using is from Circo Computer Systems. It is ideal for the mother board of the CoCo and even the old larger multipak interface. The cases are $89 plus $5.50 S&H. (Better prices are possible with group orders.) The model is the CC-310-D mini tower w/PS. Ask for Ken when you call 1-800-678-1688. By the way the cases can be colored anything you want (there may be a slight charge for colors). The address is 148 8th Av #D, City of Industry, CA 91746. Phone (818) 369-5779.

A more down to earth idea for both the club's and his tower is to mount a sturdy handle on the top for easy transporting. We hope to see our nearly complete system at our special Holiday Meeting on December 21st.

The December meeting will be more a party than a presentation. ALL are invited to see and play with our tower and to bring your non-computer loving significant other. Just bring a bag of goodies and a dollar and you will have festive fun. Monday 7 p.m. December 21st. See you there!!

-- Donald Zimmerman --

*The **Port O'CoCo Club** meets the third Monday of each month at 7:30 in the "Stock Market" Grocery on Mile Hill Drive in Port Orchard.*

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-- Lonview/Kelso --
RiBBS (FidoNET)
(206) 425-5804

DATA WAREHOUSE BBS
-- Spokane --
RiBBS (FidoNET)
(509) 325-6787

BARBEQUED RIBBS
-- Bellingham --
PC-Board (PC-Net) - CoCo Conference #5
(206) 676-5787

OS-9 TACOMA BBS
-- Tacoma --
RiBBS (FidoNET)
(206) 566-8857

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