President's Report
7-1-91

Summertime! When the nights are short and the computing time is
shorter. Seems I sit here at the keyboard for only short periods
of time during these HOT months. To many other things to do. We
also notice that there's a drop in club meeting attendence
during these dog days of summer and that is unfortunate. Some of
our most informative meetings have taken place during the
summer. Such as the presentation of the MM-1 computer system and
last months OS9 for beginners show by Al Wagner. These were both
exellent meetings with tons of usefull information being passed
about. This July's meeting will be on the subject of utilities,
now who doesn't need or use these little jewels! So if you can
plan to attend the July PJCCC meeting.

                    Rick

Secretary's Report
7-1-91

The June Penn Jersey Color Computer Club meeting was called to
order by the President. The minutes of the last meeting were
approved as written in the 6809 newsletter. The Treasurer's
report was also approved as printed. There was no old bussiness
pending and the was no new bussiness discussed. The meeting was
closed and Random Access took place with a discussion on many
topics concerning Coco. A fine prentation was held on OS9 from a
beginners view by Al Wagner. Al not only provided a solid
presentation but also provided a 3 speed fan to cool his
audience.

Sysop Report
7-1-91

Your PJCCC Bulliten Board System continues to grow! Over 250
calls and 150 message posts have been logged along with our
first out of state call from Minnesota. Again I wish to
recommend users take advantage of our file system on the
Maverick BBS, there are alot of fine files availible for
download there! A look this month will fine a file called
Z3.BIN. Many in the PJCCC have used "Z" for the Coco 2 and loved
its ease of use. However when they upgraded to the Coco 3 they
found "Z" would no longer work! Well the new version is now in
the files section here. One word of caution "Z3" does not like
Owl-Dos and it's been my experiance that you should be very
carefull with your first uses of "Z3" ie. Don"t use it on
valuable data right away. first try it on some old scrap files
to make sure you have no compatiblity problems. I've bombed some
important disks before I found out that "Z3" and Owl-Dos don"t
mix.
Since this month we will be discussing utilities at the
meeting, I've deceided to pack the BBS files with more
utilities. So have a look around and feel free to pull any of

those files listed on your BBS. And as always if you encounter a bug or get lost as to how to do something feel free to page me by pressing "C" during your logon or call me voice at 767-9344. I'll do whatever I can to get you online including setting up your system at your house if need be and time permits! Our goal is to have all PJCCC members online!

                    Rick Hengeveld
                    Sysop Maverick BBS
                    760-0456 8N1 300/1200 baud
                    7 days a week 24 hrs. a day!

                    THE LIBRARY CAR
                    Al Wagner
Welcome once again to the PJCCC 6809 Express Library Car. This month I'll dispense with the excuses, just watch that you don't trip over something trying to find a seat.

If you were one of the privileged few to attend the June meeting of the PJCCC, I was able to show you how to boot an OS9 disk, how to format a disk, a bit of a demonstration of the OS9 directory trees, how to run the config program, and we discussed some of the features and drawbacks of OS9. What I'll cover this month is a review of the directory tree structure, the two directories that are active with OS9 and a few miscellaneous things that come along for the ride.

What is a directory tree? Well, picture a real tree. At the bottom supporting the whole tree is the root (primary or root directory). From that are various branches (more directories) and from some of those are more branches (still more sub-directories). This branching continues until one finally comes to the leaves (the actual data files and programs). Some branches may have leaves as well as other branches. Let's relate this to OS9 and RSDOS. With RSDOS there is only one directory. This would be the ROOT directory. All files are in this directory and it can NOT contain any other directories. It makes for a very boring tree. One central stem with leaves.

Now let's look at OS9. The directory that is created when the disk is formatted is called the ROOT directory. The root directory will be at the bottom of all other directories or files. On a system disk (a disk that can be booted), there will usually be at least three things. They are two files (OS9Boot and startup) and a directory (CMDS, more on this one shortly). OS9Boot is one of the files that are needed to make the OS9 system work (there are others that are hidden and do not show anywhere using "normal" methods). It contains the information on the drives, monitor, file handling, the printer and many other details about the hardware that are setup when config is run. The startup file is optional but is usually included. This file is actually what is referred to as a PROCEDURE FILE. What this means is that this file is actually a series of commands that could be entered manually from the keyboard. This file usually contains the command to set the time, possibly a

```
OT
 \
   \
     \ LETTERS
           \
             \




            ¦ \ JUNE
            ¦        \
            ¦          \ RICK
            ¦       ¦        \ letter1
            ¦       ¦        ¦ letter2
            ¦       ¦ OTHERS
            ¦
            ¦  JULY
            ¦        \
            ¦          \ RICK
            ¦       ¦        \ letter1
            ¦       ¦        ¦ letter2
            ¦       ¦        ¦ letter3
            ¦       ¦ OTHERS

      etc.
```

you type a command such as LIST, the computer goes through a search for the command. The SHELL (itself a small program) receives the command line from the keyboard and begins the search. It first looks in RAM. If the command is not found there it then looks in the execution directory. If found, it immediately loads it into memory and executes it. If not, then it tries one more place. It looks in the data directory and if found assumes it to be a procedure file (a list of keyboard commands) that it then proceeds to execute as if the command(s) were typed in from the keyboard. If it still can't find the command, it gives you an error number. In this case it would usually give error number 216, file not found. One thing that you might have noticed about this is that the system does not expect and in practice will not have all commands in memory all the time. This allows OS9 to have a large variety of commands and still be able to run in minimal amounts of memory. As each command is completed, if it were not in memory to begin with, it is kicked out of memory freeing that space for other things. This also allows commands to be added or deleted easily as it only requires the addition or deletion of a file and not a complete software rewrite. One possible drawback to this is that the execution directory must be available to the system at almost all times. I say almost all times as there are ways around this for specific situations. I'll cover more on this in a later installment.

As might be expected, since there are two directories that are active, there are two ways to access them. If you type DIR<enter>, you will get the data directory. But if you type DIR X<enter>, you will get the eXecution directory.

One more thing about accessing directories. When you type DIR<enter>, you will just get a list of the names of the files in that directory. OS9 though has much more information available about those files. All you have to do is ask! If you type DIR E<enter> you will see an amazing amount of data. (The E must stand for "Everything".) It will report the last date and the time on that date when the file was modified, who the file owner is (has to do with being able to have more than one terminal operating on one computer), the name of the file, the attributes (is it a directory, can it be executed, written to, read, and by whom), the starting sector and the size of the file.

This brings us to the question, am I stuck forever with these two default directories? The answer of course is no! There are two commands to change directories, one for each type. (Figures, doesn't it?) CHD will change the data directory and CHX will change the execution directory. But how do we tell OS9 where the new directory is? This brings us to what is known as the PATH. A complete path starts with a slash and a device such as /d0. D0 stands for drive zero. Let's say we have a directory on a disk in drive 2 called letters. In that directory we have two more directories, one called business and one called personal. In those we can have still more directories dividing up the letters by month, recipient, and/or other criteria. In the personal directory, we have a directory for each month and within those we have a directory for each recipient (this assumes you write more than one letter to each person each month). Say we write three letters to Rick in July, how might the tree look and how would we write a path to that letter.

full path would be /d1/LETTERS/JULY/RICK/letter3. If we had to access the three letters several times that would be quit a bit of typing each time. To make things more convenient, we could change our directory to the one containing the three letters. We would do this with the command CHD<space>/D1/LETTERS/JULY/RICK<enter>. Now if we type DIR<enter>, we would see the three letters listed that exist in that directory! Having changed our data directory, if we wanted to list the second letter mailed to Rick in July, all we need do is type LIST letter2<enter>. To return to the original default directory all we need do is type CHD /DD<enter>.

I know we've chatted a little longer than usual but engineer Pete tells me that the Express is going to skip the August run and I wanted to give you enough to chew on over the summer. We're pulling into the last station for this run. I'll see you at the July and August meetings. Have a good summer and oh yeah, don't trip on the boxes on the way out.

TREASURER'S REPORT
By Clyde Gano

Statement date 6/28/91

Bal. on hand 6/3/91	$235.95	
Receipts-		
	0.00	

Total Receipts	$235.95	

Disbursements-
Peter Unks 6809EX mailing

June - $5.10		
July/Aug.$6.90 CK#248	$12.00	
Bell of PA June CK#249	8.42	

	$ 20.42	

Balance on hand 6/28/91 $215.53

This issue consists of totally unedited copy right off our club BBS. Next issue (minus gremlins) will appear in Sept. See you at the summer meetings July 26 and Aug 30!

greeting, and may contain additional system setup information
that changes default conditions in the system modules.

ROOT DIRECTORY

```
\

    \

      \ CMDS

    ¦     \

    ¦       \

    ¦         \ attr

    ¦           list

    ¦           tmode

    ¦           dir

    ¦           and many more!

    ¦

    ¦ startup
```
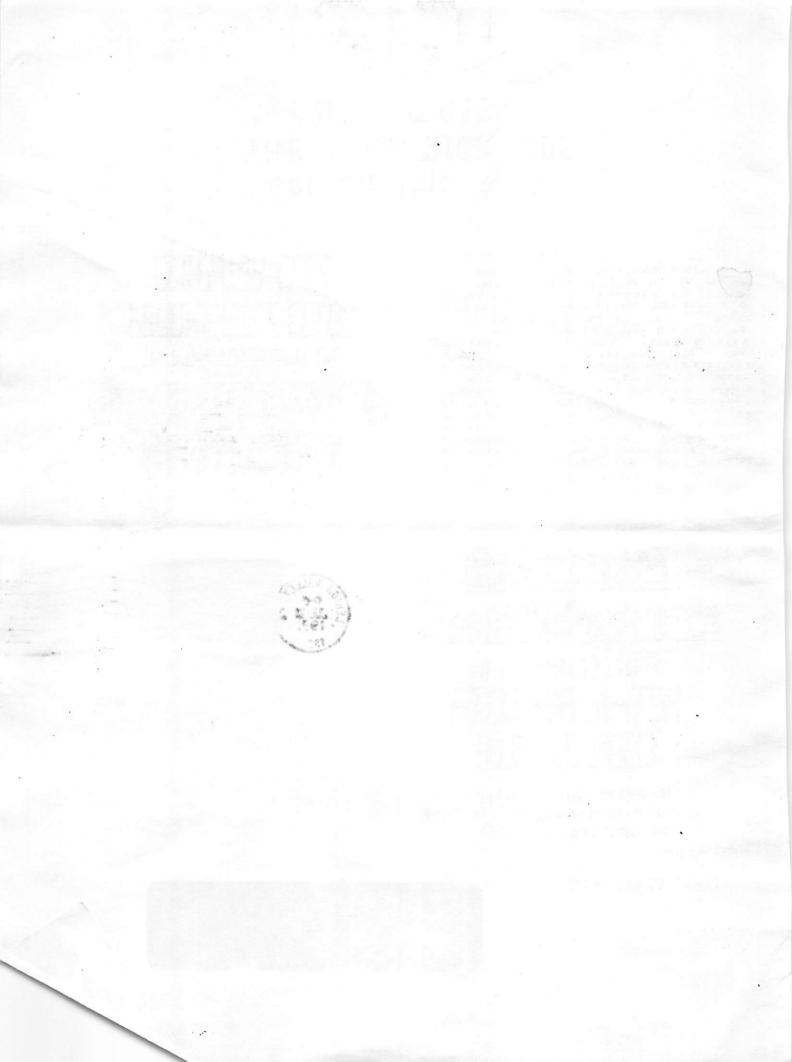
One thing that might be noted from the above diagram is that
directories are usually capitalized and files are not. This is
NOT automatic. It is also not mandatory. It is just a
convenient way to recognize a directory vs. a file. Now back to
our discussion of the startup file.

For instance, let's say that you intend to use the LIST
command to display files to the screen. As the system comes,
the file would fly past as quickly as the computer and the disk
drives could get it up on the screen. To modify this condition,
one could use the TMODE command to cause the computer to pause
whenever a screenful of data has been displayed. You could put
this in the startup file as the command line "TMODE .1 PAUSE".
There are many other such modifications that can be made to
customize your system. Procedure files can actually get complex
enough that one could think that they are witnessing the
execution of an application program. We will discuss this in
depth another time.

The other "file" one would see is actually the CMDS
directory. Contained in this directory are all the commands
that you have at your disposal. Tmode and List would be listed
as files in this directory. This brings us to the two
directories that OS9 uses to do its work. These directories are
known as the EXECUTION and DATA directories. Upon bootup, the
execution directory defaults to the CMDS directory and the data
directory defaults to the root directory.

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H. Peter Unks, Editor

LEHIGH VALLEY
JUL 21
1991
Mary Lyon USA 2   Mary Lyon USA 2   Yosemite USA

FIRST CLASS MAIL

Mr.   Eric   Rhyder