

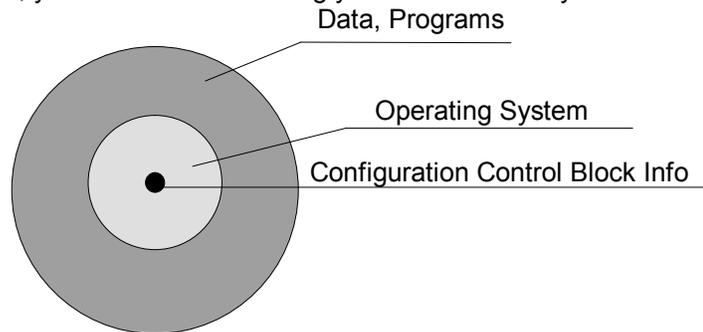
## RESTORING YOUR SYSTEM

It is important to 'Do a Restore' every several months so that the information on your disk can be reloaded to make optimum use of your disk capacity. As information is to be saved on disk, the system goes out and looks at an 'OVERFLOW TABLE', which tells what disk space is available. Next the system evaluates how much is needed against the different size chunks still available. It tries to find the chunk that is closest to the size it needs, so as not to fragment the disk any further. As fragmentation occurs, disk access speed slows - and therefore so does performance.

Information is stored on your disk in groups of frames (1 frame=2056k). When there is not a single chunk large enough to facilitate what we need saved, then information must be stored in several different locations, chained together by pointers. The longer the chain, the longer it takes to access that information.

Sometimes when we have system problems, the 'OVERFLOW TABLE' becomes corrupt. This is noted by an 'ABORT @ 33, 34 or 35. Should this ever occur, have everyone immediately remove their hands from their keyboards and call for assistance! This means that we can not trust that the overflow table is telling us where there is unused disk space. If we do request to save something on disk, we actually may overwrite something already saved there, for example, the customer or order files. The system is, for whatever reason, no longer recognizing things correctly. This is another reason you may have to 'Do a Restore'.

Another reason you may have to 'Do a Restore' would be if you had to change anything in your "Configuration Control Block" (or CCB), like adding ports or disks, etc... Changing these things would overwrite your operating system and as you reloaded the operating system, you would be overwriting your data. Picture your disk as below:



If you make the CCB grow, it will be overwriting part of the O/S. The O/S will remain the same size (unless you are loading on a different operating system), but will have to start out further on disk because of the larger size of the CCB. As you move the operating system, you are overwriting the data and everything else saved on disk. Anytime you change the size of the 2 innermost circles above, you must do a fileload, or RESTORE.

### To start your RESTORE:

- <1> Make sure you have done both a full FILE-SAVE and a VERIFICATION (one of the prompts you get when you start the save). If there were ANY problems whatsoever, clean the heads of the tape drive and start these processes over again. Only what is on these tapes will be on your system after the restore - Nothing more, nothing less. If we begin the RESTORE and find a Parity Error on the tape, for example, we would have to go back one more filesave tape and proceed from there. We would keep going backwards to previous filesaves until we had a 'good' one. If there had been a problem with your tape drive, and you had not been aware of this, and nothing was being saved correctly, the verification should have caught this. You could, theoretically, lose your entire system, permanently, forever... So, it is extremely important to get a 'good' file-save and verification.
- <2> All users should be logged off from the file-save and verification, but if you have permitted them to continue doing inquiries since the file-save started, have everyone now log off. To verify everyone is logged off and to set the maximum number of users permitted on the system down to zero, see instructions in the 'SHUTDOWN' documentation.
- <3> Get to TCL in SYSPROG. See again, these instructions in the 'SHUTDOWN' documentation.
- <4> Insert the first file-save tape and lock it in place.
- <5> Type at TCL in SYSPROG:  
>:FILELOAD <RETURN>
- <6> All the account and file names should start scrolling up your screen, as each is restored onto your system. You will be prompted to change tapes. Follow instructions on screen.
- <7> When the FILELOAD is complete, the system will reboot itself and take you to the system configuration menu.

Follow instructions in 'SHUTDOWN' documentation to reboot system and set maxusers back up. You may get the message that there are: '...unloaded native patches...'. Call for assistance.