Disk Pack, Adding

Adding an Auxiliary Storage Pack Disk on CDC NOS 2.8

To create a new disk, we first have to add the “hardware” in the DtCyber initialization file. Let’s add an 844-41 disk. This was a removable disk pack style of device with:

- 64 words/sector
- 24 sectors/track
- 19 tracks/cylinder
- 823 cylinders/unit

This gives 24MWords (24,018,432 60 bit words, to be precise), or about 180MBytes.

To define such a disk in cyber.ini, we can use:

```plaintext
equipment.txt

[equipment.nos287]
... existing entries ...
DD844-4,0,3,01,disks/NOS-2.8.7/DJ01
```

This will put it as equipment number 0, unit number 3 on channel number 1 with the host disk file for it being called DJ01 in the usual disks directory.

We will need to make changes to the EQPDECK when we boot so that NOS will see this new hardware. To do that, we need to see the various decks when we deadstart so we can add suitable entries. So, while in cyber.ini, we need to set a deadstart panel switch so that these will be shown.

```plaintext
deadstart.txt

[deadstart.nos287]
... existing entries ...
change:
0025 wxyy w=level, x=display, yy=cmrdeck

to:
0125 wxyy w=level, x=display, yy=cmrdeck
```

Then start DtCyber.

When DtCyber starts, in the console, use:

```
(CR)
```

for AUTO as usual.
The CTI memory tests will run, then the **CMRINST** display will appear. We don't need to change anything in **CMRDECK**, so type:

**NEXT.**

The **EPQINST** display will appear. We need to make changes here. Switch from the instructions to the **EQPDECK** display with:

```
]
```

Then type the following three lines (which should all be accepted):

**CYBER Console**

```
EQ023=DJ,UN=3,CH=1. PF=23,X,MYPACK. INITIALIZE,AL,23.
```

This first tells NOS about the new “hardware”, then tells it that this new device can be used for permanent files as an auxiliary storage device (not part of a FAMILY) and that it has the packname MYPACK.

Finally, it tells NOS to initialize the disk (AL - initialize everything). This is like formatting and putting a filesystem on a disk.

NOS will then start in the usual way.

When deadstart is complete, however, MSI will run (Mass Storage Initialization) and carry out the requested initialize of the new disk.

After that, the disk can be used. E.g.:

**CDC Terminal**

```
/ get,ftgplot. / save,ftgplot/pn=mypack. / catlist/pn=mypack
```

The above will get ftgplot and copy it to the new disk. The files on the new disk will then be listed.

This is a PUBLIC auxiliary storage pack that all users can use. It is also possible to have PRIVATE packs dedicated to a specific user.

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