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## Macintosh Portable: How Battery Charge Affects Activity Status

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TOPIC -----

If my portable is running from battery, and the system sleep time is set at 20 minutes (just for example), and I walk away with 15 minutes to go until the "reserve power" dialog appears, what will happen?

In 15 minutes, the dialog sleep warning appears. But, when a modal dialog such as the reserve power dialog is on the screen, when 5 more minutes have elapsed does a system sleep even occur, or will the machine actually drain all battery supplies if not attended?

What if my portable is running from battery and attached to an AppleTalk network? When the machine goes into a sleep voluntarily (set by me in the CDEV), the "I'm trying to sleep but I'm connected to a network" dialog appears and the machine never actually sleeps.

Aren't these potential battery-drain situations?

DISCUSSION -----

Here is a chart that shows what the Macintosh Portable is doing at various battery charge levels:

Battery Voltage	Macintosh Portable Status
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7.2	Charging with adapter
6.4 - 6.0	Battery without adapter (normal operation)
5.9	1st software warning
5.86	2nd software warning
5.8	3rd software warning
5.76	10 second warning

5.72	Software shutdown
5.65	Hardware shutdown
5.4	Battery sulfation

Once the Macintosh Portable's battery reaches a voltage level 5.72 volts, the machine goes into software shutdown mode. This will occur regardless of the activity of the machine, even when connected to AppleTalk networks. This mode is equivalent to sleep mode except that the Macintosh Portable will not come out of software shutdown mode until the battery charger is plugged in or a battery with more than 5.8 volts is installed. Once in software shutdown mode, the Macintosh Portable will keep the contents of memory intact for about five days.

When the Macintosh Portable's battery reaches a voltage level 5.65 volts, the machine goes into hardware shutdown mode. This mode removes power from the entire system except for the Power Manager chip. All memory contents are lost. The Macintosh Portable will not come out of hardware shutdown mode until the battery charger is plugged in or a battery with more than 5.8 volts is installed.

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