# ROMs, Blocks, and the Debugger

(...and all that crap most of us don't understand)

## Early Macintosh ROMs

With a debugger, look at the last few locations of the ROM of your machine. Developers put their initials there, as well as the date that the ROM was linked. For example, the 128k ROM (Mac Plus) contains, at \$41FFC0-\$41FFFF:

ALR ELR BA BMB EHB JTC SC DLD PWD KWK LAK SEL BWed, Nov 6, 1985 These are the initials of (?=someone): Erich Ringewald, Bill Atkinson, Bill Bruffey, Ernie Beernik (sp?), Jerome Coonan, Steve Capps, Donn Denmann, Pat Dirks, ?, Larry Kenyon, and ?. My 840AV, the Powerbook, and LCIII, did not have the initials but did have the date which may suggest that newer models do not have the initials.

#### **Absolute Sector**

In absolute sector \$1 of \$FA71F the Hex for the whole page says "DADA" repeated over and over again. Kind of random. Look in the Norton Disk Editor in the second page of the Boot Block called the Bootstrap Code.

## Disk Type

If your bytes for the disk type are \$D2D7 (an MFS volume) it stands for "RW" (Randy Wigginton) in ASCII. An HFS volume would be \$4244 which stands for "BD" (Big Disk) in ASCII.

#### ROMs for the Plus and Below

Macintosh 128k ROMs had chip codes which began with the letters L and H ("Lonely Hearts") and were therefore nicknamed appropriately, while the chip codes of the 32-bit-wide CPUs use the letters A, B, C, D ("Ala Baster Can Delabra"). These were the development names for the ROMs and in result the name's initials were given to the ROM.

### Signature Byte

SigBytes identify the Boot Block. \$4C4B signifies that you have a bootable Macintosh disk. "4C4B" translated in ASCII means "LK". This stands for Larry Kenyon who originally designed the Mac's File System. From Norton Disk Editor.