



Macintosh ROM Secrets



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1) THE SE ROM SLIDESHOW

In the ROM of the original Macintosh SE (*not* the SE/30!) is a four-frame slideshow composed of digitized b&w images of the development team.

To view the slideshow, hit the interrupt switch to enter the debugger, and type the following:

```
G 41D89A <return>.
```

Alternatively, you can write a program which calls this procedure:

```
PROCEDURE DoIt;  
  Inline $4EF9, $0041, $D89A; { jmp $41D89A }
```

The slideshow is an endless loop; once started, the only way to quit is by rebooting (or turning the power off).

2) THE "STOLEN FROM APPLE COMPUTER" ICON

This icon lurks in the ROM of *every* Macintosh produced. Rumor has it that code to display this icon also exists in ROM, so that an Apple employee/wizard could walk up to a potential Macintosh clone, type a few commands, and verify that the machine's ROM was in fact "stolen".

This icon exists at different locations in different versions of ROM; currently, yours truly has only been able to verify its existence in two of those versions:

```
ROM Version 117, rev. 1-3 (Macintosh Plus):          $0040E132  
ROM Version 120, rev. 3 (Macintosh IIx, IIcx, SE/30): $408A065A
```

If you have access to other machines, you can use the Graphic memory display feature of SUM II Tools 2.0 to locate the icon. (Be sure to set the memory base to \$40800000, the starting address of ROM on the Mac II series, or \$00400000 on a Mac Plus or earlier machine.)

It's reasonable simple to write a program that displays the "stolen icon".

Here's a THINK C function that does the job:

```
PlotStolenIcon(inRect)  
Rect *inRect;  
{  
  asm {  
    BRA. S    @2  
@1   DC. L    0x40E132      ; address of icon (Mac Plus ROM only!)  
@2   MOVE. L  inRect, -(SP) ; push rect argument  
    PEA     @1             ; push "handle" to icon  
    DC. W    0xA94B        ; _PlotIcon  
  }  
}
```

3) HIDDEN COLOR PICTURES IN THE IIci AND IIfx

The 512K ROM (also known as the first "32-Bit Clean" ROM) introduced with the Macintosh IIci evidently had some extra room for fun.

On the IIci, do the following:

- A) Go into the Control Panel and set the date to Sept. 20, 1989 (9/20/89 -- this just happens to be the machine's release date.)
- B) Reboot and hold down cmd-option-c-i (yes, all 4 keys simultaneously.)
- C) Surprise! Up pops a color picture of some Apple employees!

On the IIfx, the procedure is similar:

- A) Set the date to March 19, 1990 (3/19/90 -- the release date.)
- B) Reboot while holding down cmd-option-f-x.
- C) Yes, it's another color picture!

4) HIDDEN STARTUP DISK IN CLASSIC ROM

The Macintosh Classic has an "undocumented feature": a complete, bootable system "disk" in ROM. This was an experiment in creating a "diskless workstation" machine that apparently wasn't considered important enough to mention as a feature. Rumor has it that the Macintosh LC and IIsi also contain a hidden ROM disk, but this has not yet been verified.

To access the hidden disk, reboot the Macintosh Classic while holding down cmd-option-x-o. When the Finder comes up, the ROM disk should appear on the desktop. Note that you can use the Startup Device cdev to specify this disk as the startup device; subsequently, the machine will boot from ROM without the need for a "real" startup disk (handy, if you've only got one floppy disk drive.)