Apple /// Computer Information

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│ APPLE /// HISTORY FROM BOOK   │ │   │
│   │ │ 163 │
│ "THE MAC BATHROOM READER"   │ │   │
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OWEN LINZMAYER   1994

Ex Libris David T. Craig

The Apple III Fiasco

Following two years of development, the Apple III (code-named Sara after chief engineer Wendell Sander's daughter) was announced on May 19, 1980 during the National Computer Conference in Anaheim, California. With Apple's typical flair for spectacle, the company rented out Disneyland for five hours the following night at a cost of $42,000 and transported an estimated 7,000 NCC attendees to the site in British double-decker buses.

Apple was proud of the Apple III because it represented many firsts for the company. Foremost, it was
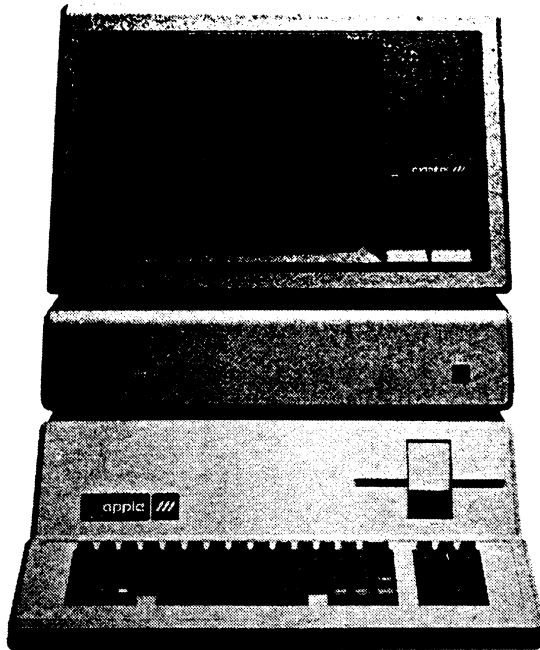
Courtesy of Apple Computer, Inc.
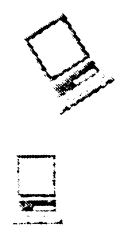
The Apple III was the firm's first failure.

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the company's first attempt at building a powerful busi-
ness computer. And it was the company's first major
departure from the tried-and-true Apple II architecture.
It would also prove the company's first bona fide failure.
Unfortunately, instead of learning from the experience,
Apple repeated many of the same mistakes with the Lisa
and the Mac.
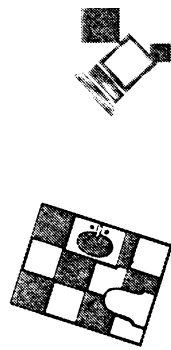
6502B? Yes

The Apple III was sold in two different configurations
ranging in price from $4,340 to $7,800. At the heart of
each was a Synertek 8-bit 6502A microprocessor running
at 2 megahertz (twice the speed of the Apple II), a maxi-
mum of 128 kilobytes (K) of random access memory, built-
in keyboard with numeric keypad, one internal 143K, *140K? Yes*
5.25-inch disk drive manufactured by Shugart, and you
could add additional devices via the two serial ports. In
effect, the Apple III came standard with everything most
people eventually added to the Apple II, and if that wasn't
enough, there were four internal slots that accepted
Apple II peripheral cards. *Daisy-changed floppies, up to 3 external*

Although it had an Apple II emulation mode, the
Apple III worked best with software written specifi- *Parallel port? No*
cally to take advantage of its proprietary Sophisticated
Operating System and new features such as a built-in
real-time clock and video capable of generating 24 lines
of 80-column text and up to 560 by 192 pixels in the
monochrome graphics mode. On paper, all the specifi-
cations were quite impressive, but implementing them
proved a humbling experience for Apple.

SOS → ProDos

Wot and SOS (BYTE interview)

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"We had to put chips in to disable some Apple II features so people's heads would have the right image that Apple IIIs are for business and Apple IIs are for home and hobby."

Steve Wozniak

Apple originally promised to ship the Apple III in July, but production problems plagued the product throughout the summer and into the fall. Unlike the Apple I and II which were essentially the work of one man, Steve Wozniak, the Apple III was designed by a committee headed by Steve Jobs, who would demand one thing today, then the opposite tomorrow. The shipping delays threatened to mar Apple's public offering in December, so managers ignored the dire warnings of engineers who knew what would happen if they pushed the Apple III out the door before its time.

"The Apple III was kind of like a baby conceived during a group orgy, and [later] everybody had this bad headache and there's this bastard child, and everyone says, 'It's not mine.'"

Randy Wigginton, who at age sixteen was one of Apple's earliest employees

*Insanely Great,* pp. 123-124

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As soon as units began trickling into distribution in late November, the worst fears of the engineers were realized.

On February 10, 1981, Apple announced that the Apple III would no longer contain the much heralded built-in clock/calendar features because National Semiconductor's clock chip didn't meet Apple's specifications. How the flaky parts got into a shipping product nobody was willing to say. Apple dropped the base price of the Apple III to $4,190 and gave a $50 rebate to everybody who had purchased an Apple III up to that date.
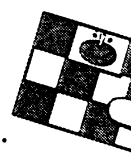
When the first volume shipments began in March 1981, it became apparent that dropping the clock chip was just a finger in the dike. Approximately 20 percent of all Apple IIIs were dead on arrival primarily because chips fell out of loose sockets during shipping. Those that did work initially often failed after minimal use thanks to Jobs' insistence that the Apple III not have a fan (a design demand he would make again on the Mac). He reasoned that in addition to reducing radio-frequency interference emissions, the internal aluminum chassis would conduct heat and keep the delicate components cool. He was wrong.
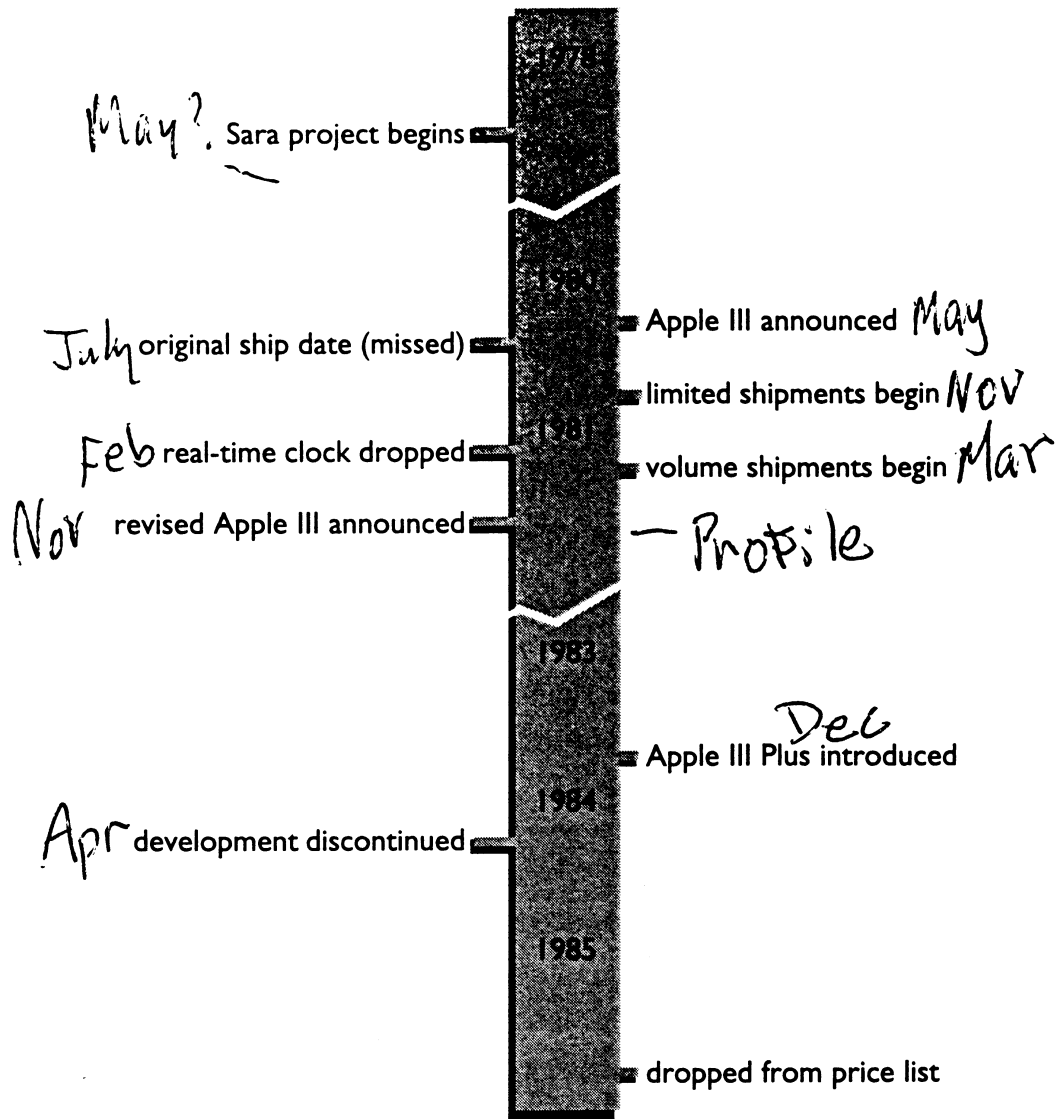
Jobs & /// case design patent

"[Jobs] could see that horizon out there, a thousand miles out. But he could never see the details of each little mile that had to be covered to get there. That was his genius and his downfall."

Jay Elliott, head of human resources at Apple
The Journey Is the Reward, p. 372

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Compounding the problem was that Jobs dictated the size and shape of the case without concern for the demands of the electrical engineers who were then forced to cram boards into small spaces with little or no ventilation and circulation. As the computer was used, the chips got hot, expanded slightly, and slowly worked their way out of their sockets, at which point the computer simply died. As a solution, Apple actually recommended lifting the

Apple III Timeline

May? Sara project begins

July original ship date (missed)

Feb real-time clock dropped

Nov revised Apple III announced

Apr development discontinued

Apple III announced May

limited shipments begin Nov

volume shipments begin Mar

— Profile

Dec
Apple III Plus introduced

dropped from price list

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front of the computer six inches off the desktop, then letting go with the hopes that the chips would reseat themselves.

The problems with loose chips were exacerbated by short cables between internal components and non-gold connectors that suffered from corrosion. To its credit, Apple didn't bury the problem; Mike Markkula, president and CEO, publicly admitted "It would be dishonest for me to sit here and say it's perfect" (*The Wall Street Journal*, April 15, 1981, p. 29). Apple instituted a liberal repair policy, swapping brand new Apple IIIs for bad ones on the spot, no questions asked. Unfortunately, the replacements often failed too.

> **"We had to replace fourteen thousand of them. I must say that, as far as enhancing our reputation, this operation was a success. We received thank-you letters telling us that General Motors would never have done the same."**
>
> Jean-Louis Gassée, then
> general manager of Apple
> France
> *The Third Apple*, p. 102

On November 9, Apple announced a revised Apple III with a base price of $3,495. The company steadfastly claimed that the original problems were linked to shortcomings in manufacturing and quality-control procedures rather than the underlying design of the computer. Nonetheless, the new Apple III featured different sockets, updated software, memory expansion up to 256K, and an

optional 5-megabyte hard disk drive. Based upon the Seagate ST506 mechanism, the $3,495 ProFile was an important addition to the system since IBM didn't yet offer a hard drive for its PC introduced that August (compare $700/MB in 1981 to less than a $1/MB in 1994!). Of the 7,200 original Apple IIIs that had been sold to date, 2,000 were replaced with the new version at no charge when it became available in mid-December.

"It just wasn't a good enough machine and it had so many flaws from the start that when we reintroduced it we should have called it the Apple IV."

Steve Wozniak

Even after revising the Apple III, sales remained disappointing. Analysts estimate Apple sold 3,000 to 3,500 units a month, just one tenth the sales rate of the venerable Apple II. According to InfoCorp, a Santa Clara research firm, the Apple III had an installed base of only 75,000 units by December 1983, compared to 1.3 million Apple IIs.

"The Apple III is designed to have a 10-year lifespan."

Mike Markkula

The Wall Street Journal,
April 15, 1981, p. 29

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Potential buyers had been turned off by all of the bad publicity as well as a lack of useful software that took advantage of the Apple III's unique Sophisticated Operating System. Industry experts openly referred to the operating system by its distress-signal initials, SOS, although Apple preferred the nickname "applesauce."

> "Apple is firmly and totally committed to supporting the Apple III and is maintaining and increasing our commitment to the Apple III as a major product for the next five to seven years."
>
> **Mike Markkula**
> *Computer Systems News,*
> November 16/23, 1981, p. 16

In a last-ditch effort to revive the product, Apple replaced the Apple III with the $2,995 Apple III Plus in December 1983. In addition to a lower price, the new model came standard with 256K of memory, a built-in clock that actually worked, a new logic board, SOS version 1.3, improved peripheral ports with standard DB-25 connectors, and a modified slot housing for easier card installation. Unfortunately, it was a classic case of too little, too late.

> "The Apple III will be a serious contender in the business computer marketplace for a long time to come."
>
> **David Fradin**
> *The Peninsula Times Tribune,*
> November 21, 1983, p. D4

Although the Apple III Plus had helped boost the installed base to an estimated 120,000 units, Apple abruptly dropped the line on April 24, 1984. In a memo to his staff, David Fradin, Apple III business unit manager, wrote "While the Apple III is an excellent business computer, it is a generally accepted view by Apple's product managers that Apple can best serve the future needs of our business computers by expanding the Apple II and Apple 32 [Lisa and Mac] product families, and by concentrating future development, marketing and sales efforts on these products. Therefore, we have decided that no further product development efforts shall be initiated and undertaken for the Apple III product line, effective immediately."

"No further product development efforts shall be initiated and undertaken for the Apple III product line, effective immediately."

David Fradin

internal memo, April 24, 1984

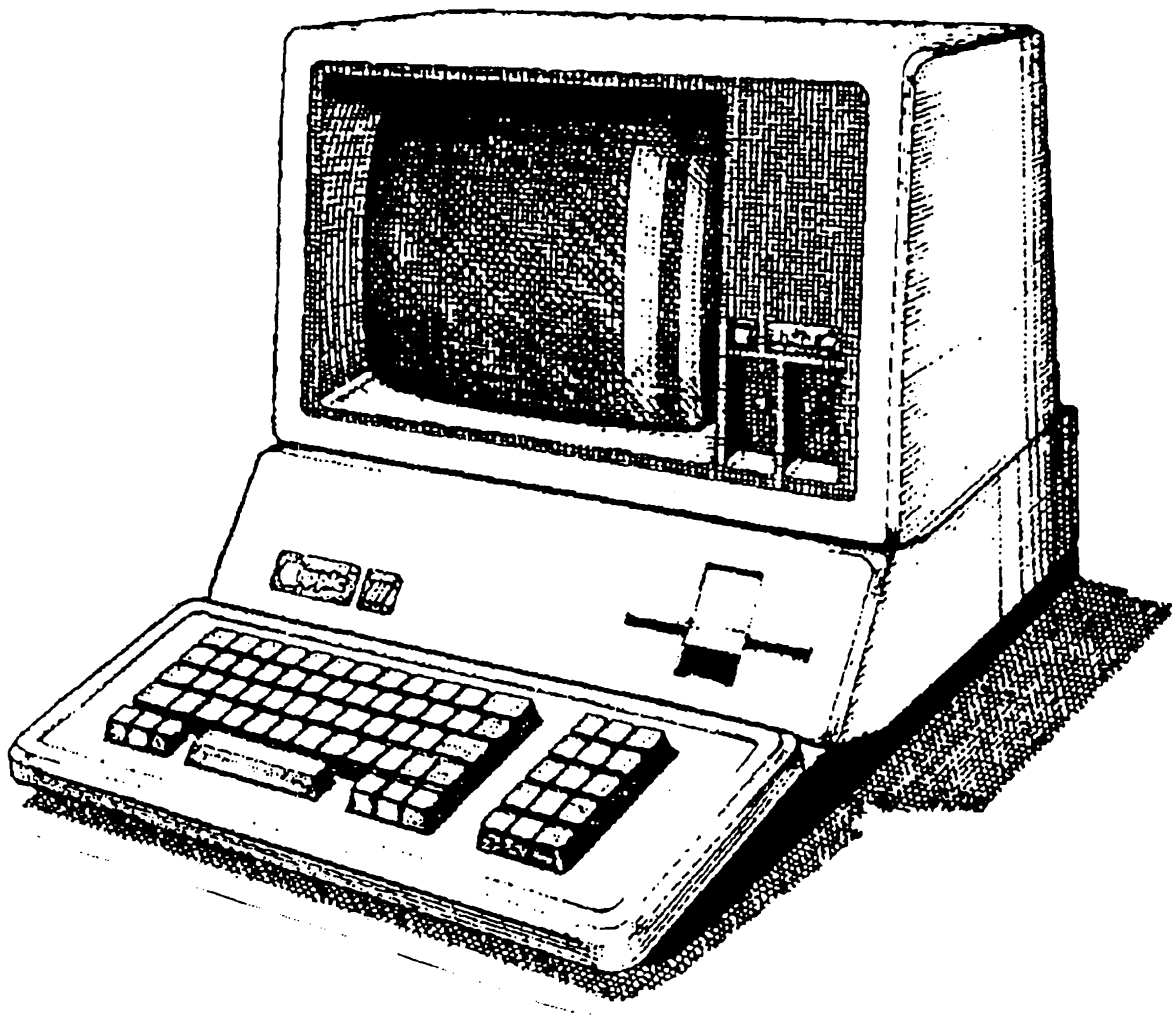After losing over $60 million on the Apple III, it was quietly removed from Apple's product list in September 1985.

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Apple III Computer Information

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