

TI-99/4A Lives On!

An Orphan Survives with Help of Loyal Users, Vendors

by Joel Dreyfuss

One nightmare haunts the consciousness of computer users who skate on the cutting edge of technology: to wake up one morning and discover that the manufacturer has stopped making their beloved machine. Such abandonment may be inevitable in the fast-changing world of computers, but it doesn't soften the blow. Those who cut their teeth on CP/M-based Osbornes and Kaypros were soon cast adrift in the surging tide of MS/DOS. In turn, quite a few owners of Eagles, Victors and Columbia personal computers found themselves abandoned when those companies went bankrupt.

The most famous—and most widely used—orphan computer of all may be the Texas Instruments TI-99/4A, launched 10 years ago as the chip maker's entry into the fledgling market for personal computers. With comedian Bill Cosby as spokesman, Texas Instruments made some 3 million of the little slab-like machines during a four-year period before getting caught up in a price-cutting war it couldn't win.

In December 1983, TI announced it would stop making the TI-99/4A. For thousands of users, the nightmare had come true: They were out in the cold.

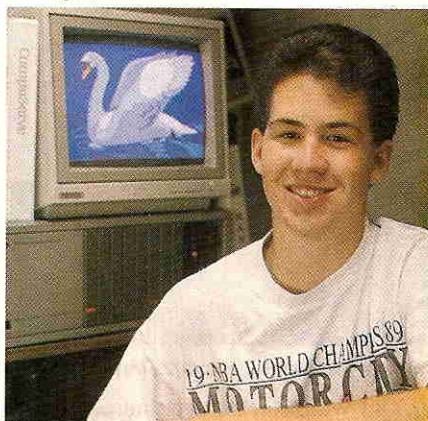
But the 99 lives! There's no better proof than the Texas Instruments Forum (GO TIFORUM), where "99" diehards share information about equipment, software and technical problems, and track user group meetings in the United States, Canada, Europe and Australia.

Since abandonment made the 99 by necessity a hacker's machine, it isn't surprising that programming languages dominate the forum's libraries: Forth, C, Assembly, BASIC, Pascal and P-system. But there also are games, utilities and music programs. The TI Forum bristles with advice for the beginner who has just dusted off an old 99, but it also will guide the expert through a complex programming problem.

No doubt, the large number of machines produced by TI created a user base large enough to assure the computer's survival and guarantee profits to the companies who service 99 users. So does the 99's sturdiness. Texas Instruments was a military contractor and the 99 was built to meet military specifications. "It could probably take two hits of a .50-caliber machine gun and survive," says Jim Horn, a Rockville, Md., resident who administers the forum. Horn, who is

retired from the military, is one of many users who first came across the 99 in a PX and fell in love with it.

The 99 was more than tough. It was an advanced machine for 1979: a 16-bit computer when Apple IIs and CP/M machines used 8-bit chips and long before the PC was a gleam in IBM's eye. Initially it was a modest machine with 16K RAM, 72K of ROM, a built-in operating system and a cartridge slot, but TI soon introduced an expansion box that gave the 99 a future. The box had eight slots and the capacity to control disk drives. Horn estimates that 80 expansion cards are now available and that users hook up everything from external hard disks to laser printers.



Junebug Clark

Dispenses expert TI advice: *Beebe*

Unlike the fate of most orphan computers, a number of companies still actively support the 99: Myarc, a New Jersey manufacturer, makes the Geneve card, which gives the 99 an 80-column display, extended memory and advanced graphics. Asguard, a Maryland software distributor, has introduced 25 software products for the 99; Triton, a distributor owned by software giant Ashton-Tate, carries products for the 99, including a version of Microsoft's Multiplan spreadsheet that sells for \$18. Even TI, the original maker, provides some support. According to users, the company will repair the interface box that connects the 99 to a television set.

Another reason for the 99's resilience is the constantly evolving base of new young users who turn up those strange little slabs. "We call them third-generation users," says Horn. "But the first and second generations never opened the box." To a beginning computerphile, the

99's first attraction is price; a shrink-wrapped 99 console sells for \$75; you can pick up a used 99 for about \$25 at a computer fair, and as little as \$5 at a yard sale.

Matt Beebe is one of those "third generation" users, a 15-year-old who often dispenses expert advice on the forum. Beebe, who lives in Millford, Mich., 50 miles northwest of Detroit, got his "4A" in 1980 when he was just seven. He started with games and simple programming and expanded his machine for word processing when he reached junior high school. He later added a modem and a CompuServe subscription.

Beebe, who helps out on the TI Forum, estimates that he spends 20 hours a week online writing messages and answering questions. His age has never been an issue: "On CompuServe nobody ever thinks to ask how old you are," he says.

Beebe, who takes computer classes in high school, had a big decision to make last year: Should he switch to an IBM PC? He evaluated the costs and decided to stick with the 99. "The IBM would have cost twice as much and not given me much more except—maybe—a better word processor," he concluded. He added a Geneve card and color monitor (512 by 640 resolution) and is working on some software he hopes to sell commercially. He does offer a backhanded compliment to the IBM PC he uses at school. "It's really nice," he says. "You can do just about anything you can do on the 99/4A."

His loyalty is typical of 99ers. They scrounge the junkyards for machines, travel hundreds of miles to user group meetings and fiercely defend their aging machines against the adoration of the newer and better that dominates the world of computers.

Horn has his own pet project. He wants to rescue the thousands of 99s gathering dust in closets and basements and get them into the hands of the many children who don't own their own computers. One teacher who obtained a number of 99s reported important gains when she allowed students to take their computers home, something she couldn't do with more expensive machines.

Horn tries to explain that fierce cult-like allegiance of 99ers. "We've been out on the limb since December 1983," he says. "We're a community. It's wonderful to enjoy the freedom that being an orphan gives you. Nobody's going to rescue you." For those loyal 99ers, the TI Forum on CompuServe is the lifeline to a world of support.

Joel Dreyfuss, who covers the computer industry for Fortune, has a Kaypro II in his closet.