Hewlett Packard marks 25th anniversary of calculator

By Bennett Hall

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CORVALLIS, Ore. -- Dale Kern would be lost without his HP 12c calculator.



AP Photo. Dennis Harms displays his HP 12c financial calculator, first produced 25 years ago.

"I use it every day," said Kern, a real estate broker with Commercial Associates in Corvallis.

He got his first 12c when he was studying for his real estate license and still considers it an indispensable tool for figuring mortgage payments, amortization schedules and other key aspects of property transactions for his clients.

Today he has three of the pocket-sized calculators -- one in his day planner, one on his desk and one as a backup, just in case.

"There was a rumor about two years ago going around the grapevine that they were going to stop making them," Kern said. "So I went out and bought another one that's still in the box in my office."

Stop making the 12c? Not likely.

Thanks to the loyalty of Kern and countless other professionals in real estate, finance and business, the 12c remains a staple in Hewlett-Packard's calculator lineup -- a full quarter-century after it was developed at the company's Corvallis site.

"Over 15 million units of the HP 12c series calculator have been sold since the original 12c financial calculator was introduced in 1981," said Jeff Robins, worldwide marketing director for the company's calculator division. "This is by far the best-selling calculator series HP has ever produced."

To celebrate that success, the company has rolled out a 25th anniversary platinum edition that sells for \$79.95 -- 10 bucks more than the standard 12c but down substantially from the \$150 it commanded in 1981. While the computer circuits and batteries have been upgraded, it's essentially the same machine.

Today Corvallis is known as the birthplace of Hewlett-Packard's market-leading inkjet printer technology, but the local campus started in the 1970s as the home of HP's calculator division.

Back then, the 12c was considered a breakthrough in portable computing technology, recalled Dennis Harms, who led the design team.

"We needed a size that fit into a shirt pocket easily," Harms recalled.

They achieved that with a horizontal keyboard layout, a 10-decimal-place LCD screen and a heavy-duty plastic case roughly 5 inches wide, 3 inches tall and half an inch thick. With batteries that could run for months or even years without replacing, they could dispense with a bulky recharger unit.

The 12c was revolutionary in other ways, as well.

It packed in a host of important financial calculating functions accurate enough to win approval from the National Bureau of Standards, replacing bulky books of reference tables. It was built solidly enough to withstand a fall from a desk to a concrete floor. And it introduced reverse Polish notation, a more efficient way of inputting numerical data that HP had incorporated into its scientific and engineering calculators but that was new to financial professionals.

Some of the 12c's success can be chalked up to chance. Late in the design process, HP engineers decided to add a third cell to extend the battery life beyond a worst-case minimum of three months. To accommodate the extra battery, they had to make the case a little bit thicker across the top. Quite by accident, that gave the machine an ergonomic tilt.

"It turned out kind of serendipitously," said Harms, a pencil-thin 59-year-old with a neat mop of silver hair who now serves as a solutions architect in HP's consumer imaging products business.

"People thought we did that from the start to give it kind of an angle on the desk."

For the most part, however, the 12c was the product of an intensive two-year design process. Harms led a team of 12 to 15 engineers that included several future entrepreneurs, notably Rich Carone and Neal Pierce of Accu-Fab, Dave Scribner of Tripod Data Systems and Stan Mintz of Intelledex.

The group made sure the 12c had all the functionality needed in the business world, calculating everything from mortgage payments to bond yields, as well as a classic style.

"We designed this thing to look like something a business professional would want," an understated brown and gold case with a gold-plated HP logo. "It became a status symbol, like having a Cross pen or a certain brand of watch."

Inevitably, some of that cachet has worn off over the years with rapid advances in computing power. But longtime users still swear by the HP 12c, and for some professions, it remains a must-have tool of the trade.

"We still sell a few, mostly to real estate folk and people taking real estate exams," said Steve Di Stasio, supervisor of the electronics department of the Oregon State University Bookstore. "This is kind of the tried and true industry standard."

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