April 15th

Edison's Doll April 15, 1890

Thomas Edison's [Feb 11]
"Phonograph Doll" was a children's toy standing 22' inches tall, weighing a substantial four pounds, because of its porcelain head, jointed wooden limbs, and most importantly, a miniaturized phonograph embedded in its tin body. Its musical repertoire included nursery rhymes, such as "Jack and Jill" and "Mary Had a Little Lamb."

The doll had been developed back in 1877, but only went on sale today as part of Lenox Lyceum's electrical exhibition in NYC in its "Dolls' Theatorium".



An Edison Phonograph doll, 1890. The mechanism housed in the body has been removed and is displayed alongside. Photo by Mabalu. CC BY-SA 4.0.

The delay had been due partly to the difficulty of designing small, relatively lightweight mechanisms that were also sturdy enough to withstand children. Even so, the wax records wore out quickly, and were prone to warping and cracking.

This doll marked the first attempt to reproduce sound for commercial and entertainment purposes. It was also the first time people were employed as recording artists – in this case nearly 20 women to recite the rhymes. It was, however, a sales failure, and only lasted on the

market for a few weeks. By one estimate, as many as 2,560 dolls may have been shipped, but fewer than 500 were sold

First Round-the-World Telephone Call

April 15 (or 25), 1935

The first round-the-world telephone call was made when Walter S. Gifford, president of AT&T called T.G. Miller, a mere vice president. In fact both men were only around 50 feet apart, in adjacent rooms at the Long Lines Building in NYC, but their conversation travelled across some 23,000 miles. One of the phones was later preserved at the Smithsonian Institute.

Other firsts for Gifford included the first user of the transatlantic phone service [Jan 7], and a participant in American's first long distance TV demonstration [April 7]. However, the first round-the-world telegram message was sent by President Theodore Roosevelt on [July 4] 1903.

David Shannon Morse

Born: April 15, 1943;

Lexington, MA Died: Nov. 2, 2007

Jay Miner [May 31], along with several other Atari staffers, had resigned from the company after become increasingly fed up with its management, and Miner and Morse set up "Hi Toro" Inc. in Sept. 1982, which later changed its name to Amiga.

Miner's first project was the development of a 68000-based games console codenamed Lorraine (named after Morse's wife), which ultimately became the Amiga 1000 [July 23]. Lorraine was first demoed at CES [June 24] in June 1984.

By this time debts were piling up and Morse took out a second

mortgage on his house, and the company obtained a \$500,000 loan from Atari in return for giving them access to the Lorraine designs.

The issue of which company owned the Lorraine chipsets quickly became a legal matter between Atari and Amiga. It was actually mostly a proxy war between ex-Commodore founder Jack Tramiel [Jan 16] who had just bought Atari's Consumer Division [July 1], and Commodore who had recently acquired Amiga.

LISP Unveiled April 15, 1959

The LISP programming language was originally created by John McCarthy [Sept 4] as a mathematical notation for describing programs, and first described in the MIT report, "Recursive Functions of Symbolic Expressions and Their Computation by Machine" released on this day. It was heavily influenced by Alonzo Church's [June 14] lambda calculus (also announced on this day, but in 1936).

A LISP system was first implemented on an IBM 704 [May 7] by Steve Russell, who had realized (to McCarthy's surprise) that LISP's centrally important eval function could be implemented in machine code.

LISP quickly became the favored language for AI research, because of useful features such as tree data structures, automatic storage management, dynamic typing, higher-order functions, recursion, and a readeval-print loop.

The name LISP derives from "LISt Processor", although many students who have suffered before its elegantly simple syntax have argued that the name stands for "Lots of Irritating Single Parentheses."

The first LISP compiler written in LISP, was implemented in 1962 by Tim Hart and Mike Levin, which helped persuade may die-hard coders that LISP

was a real language. It was quickly followed by the influential LISP 1.5 Programmer's Manual [Aug 17].

A quote from Philip Greenspun: "SQL, LISP, and Haskell are the only programming languages that I've seen where one spends more time thinking than typing."

He also coined "Greenspun's tenth rule of programming: "Any sufficiently complicated C or Fortran program contains an adhoc, informally-specified, bugridden, slow implementation of half of Common LISP" [Dec 8].

Data General Goes Nova

April 15, 1968

Data General was founded by Edson de Castro [Sept 14], Henry Burkhardt III, and Richard Sogge of DEC [Aug 23], and Herbert Richman of Fairchild Semiconductor [Oct 1].

The three former DEC engineers had left over its management's reluctance to support their 16-bit computer project. So it was hardly surprising that the first machine released by Data General was the 16-bit Nova in 1969.

The Nova's circuit boards were similar in size to those in DEC's PDP-8 [March 22] (15 by 15 inches) but were connected together using a backplane with minimal manual wiring, which greatly reduced their construction costs and was more reliable. The computer was also rack-mounted in a similar way to the PDP-8, but smaller and considerably faster.

Announced as "the best small computer in the world", the Nova quickly gained a following, especially in scientific and educational markets. For example, Steve Wozniak [Aug 11] (in high school at the time) was said to be so enchanted with the Nova's architecture that he had photos of its internals taped to his bedroom wall.

The Nova's instruction set was also an inspiration to Charles P. Thacker [Feb 26] and others at Xerox PARC during their construction of the Xerox Alto [March 1].

The later battle between Data General and DEC over the 32-bit minicomputer market formed the background of Tracy Kidder's book, "The Soul of a New Machine" [July 00].

Canon Pocketronic April 15, 1970

Canon Business Machines of Japan announced the first handheld pocket calculator, the fourfunction Canon Pocketronic. The miniaturization was achieved by the use of four Texas Instruments (TI) chips, as part of a joint venture. TI had developed the underlying technologies in their Cal-Tech Project [Sept

The Pocketronic didn't have an LED display since they were too expensive at the time, and cheaper Nixie tubes would have made the calculator too big, and too power hungry. Instead the calculator printed its results on thermal paper tape, which still made it rather larger than a typical

"pocket" – 8.3" x 3.9" x 1.9".

IBM 3800 Laser Printer

April 15, 1975

The IBM 3800 model 001, announced on this day, was the first commercial laser printer, and was the first to start shipping in July 1976.

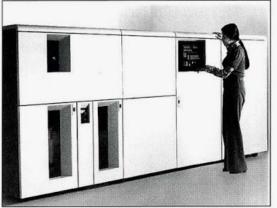
It printed at a speed of about 180 pages per minute, which was blazingly fast. As a comparison, the fastest IBM mechanical chain printers at

that time produced about 17 pages per minute.

The 3800 was also very large – about 5 feet high and perhaps 12 feet wide along the front, and was also one of the first products to use a microprocessor rather than a hard-wired controller.

However, the invention of the laser printer was due to Xerox researcher Gary Starkweather [Jan 21] back in 1969, based on his modifications to a Xerox 7000 copier.

This of course means that Xerox could have been the first to market with a laser printer but management was afraid that such a product would negatively impact their copier business. So, the innovation sat in limbo until the announcement of the 3800. Soon after, Starkweather's work became the Xerox 9700, which shipped in 1977.



An IBM 3800. (c) www.retromobe.com.

One distinction between the two products was that the 9700 was a cut sheet printer while the 3800 used continuous form paper.

First West Coast Computer Faire April 15-17, 1977

Computer enthusiasts gathered at the first Annual West Coast Computer Faire, held over three days at the Brooks Civic Auditorium in San Francisco. Every exhibit spaces had been rented out, including the balcony of the auditorium, and the hallway leading to the restrooms. The event had been organized by Jim Warren [July 20] and Bob Reiling.

Only around 20,000 - 30,000
American homes had computers at the time, but the event attracted an amazing 12,750 attendees, and they saw some amazing stuff – the debut of the Commodore PET [two entries forward] by Chuck Peddle [Nov 25], and the Apple II [next entry], by youngsters, Steve Jobs [Feb 24] and Steve Wozniak [Aug 11]. Brochures were also distributed about the shortlived, but supremely powerful, Zaltair [three entries forward].

Indeed, many historians credit this event as the birth of the PC industry, even though it wasn't the first show of its kind; that was the World Altair Computer Convention in Albuquerque on [March 27] 1976.

The next Faire was held on [March 3-5], 1978, at the San Jose Convention Center.

Apple II Announced

April 15, 1977

Prev: [Jan 3] Next: [June 5]

The Apple II and Commodore PET 2001 [next entry] both used the same processor, the MOS 6502 [Sept 16] (because it was cheap), but as part of diametrically opposed design strategies. Apple wanted to build computers with more features at a higher price point, while Commodore wanted to sell machines with less features at a lower price.

Apple's booth at the Faire [previous entry] was near the entrance and visible to everybody entering the main hall, which they put to good use by running a kaleidoscopic graphics program on a huge monitor.

Over the three days, they received about 300 orders for the Apple II, which was over a hundred more than the total number of Apple I's ever sold.

The Apple II was also their first product to carry the rainbowstriped apple logo (six colors, in the wrong order for a rainbow). Rob Janoff designed it earlier in 1977, and added the bite mark to give people a cue about its size, so they wouldn't mistake the fruit for a cherry. Janoff later discounted as myth that the logo was most meant to be a reference to Alan Turing's [June 23] death. It remained in use until [May 6] 1998, when it became monochrome.

Commodore PET 2001 Announced

April 15, 1977

The Commodore [Oct 10] PET (Personal Electronic Transactor) came fully assembled in a delicious cream-colored case. It came equipped with 4K of memory (expandable to 32K), an 8K Microsoft Basic EPROM, a membrane keyboard, a 9-inch monochrome 40 characters wide display, and a built-in cassette tape drive. However, no mention was made at the Faire [two entries back] that the one on display was the only one in existence.



The Commodore PET 2001 (1977). Photo by Tomislav Medak. CC BY-SA 3.0.

The motherboard was a redesigned version of the KIM-1 board [April 00], both developed by Chuck Peddle [Nov 25] at MOS Technology. It was Peddle's

presence at MOS that persuaded Commodore to buy the company in 1976.

The demand for the PET was so huge that the waiting period stretched up to 5 months even though people had to pay \$795 upfront. It became very popular in schools, and turned Commodore into a major player in the PC market.

Peddle later said that the owner of Commodore, Jack Tramiel [Dec 13], had promised to pay him a \$1 bonus for every PET sold. Sadly that never occurred.

Later versions of the PET introduced the idea of a "Killer Poke", a method for inducing hardware damage by the insertion of an invalid value into a memory-mapped control register via BASIC's POKE command [Jan 2].

The PET's killer poke was related to its video rasterizer circuits. In early PETs, POKE 59458,62 made the machine display text much faster. Unfortunately, when the PET range was revamped, it was discovered that this trick now triggered strange behavior in the new video chip, which could cause signal contention and possibly damage the monitor.

According to reliable records, the PET will still be in use in 400 years time, as it appears twice in the TV show "Buck Rogers in the 25th Century", protecting the planet via a defence grid and as a video phone. However, in 2285, as shown in "Star Trek II: The Wrath of Khan" [June 4; Nov 16], it won't be used on the bridge of the USS Enterprise [Sept 8], but rather as a working antique in Admiral Kirk's [March 22] apartment. This makes it seem likely that Kirk is a Basic coder in his spare time.

The Zaltair Story April 15-17, 1977

Steve Wozniak [Aug 11] has often claimed that his best computer prank was producing 20,000 brochures for a phony computer, which he distributed

at the First West Coast Computer Faire [three entries back].

The biggest selling PC of the day was the Altair 8800 [Dec 19], and so he named his spoof, the Zaltair. The "Z" was inspired by the Zilog Z80 [March 9].

The brochure advertised, among other things, a new version of BASIC called "BAZIC", with the ability to "define your own language... a feature we call perZonality".

There was a fake quote from Ed Roberts [Sept 13], then president of MITS, which spelt out the name of a rival company, Processor Technology [Aug 28], based on the first letter of each word: "Predictable refinement of computer equipment should suggest on-line reliability. The elite computer hobbyist needs one logical optionless guarantee yet."

Steve Jobs [Feb 24] picked up a copy of the brochure, fell for it, and was happy that the Apple II stacked up so well against the Zaltair. He only realized the truth when Wozniak later gave him a framed copy of the brochure as a birthday gift.

Erwise Released April 15, 1992

The Erwise web browser, built using the Motif widget set, was probably the second graphical UNIX browser, the first being ViolaWWW, released on March 9] 1992. However, neither of them was the first UNIX Web browser – that title belongs to Nicola Pellow's Line Mode Browser [Aug 6], which was purely text-based.

Erwise was the Master's project of four students at the Helsinki University of Technology: Kim Nyberg, Teemu Rantanen, Kati Suominen and Kari Sydänmaanlakka. The group had decided to make a browser at the suggestion of Robert Cailliau [Jan 26], who had briefly visited the university; their project was supervised by Ari Lemmke.

Since the acronym for their department was "OTH", they called the browser "erwise", as a variation on the word "otherwise"

Things looked bright when no lesser a luminary than Tim Berners-Lee [June 8] gave erwise a positive review, noting its ability to handle various fonts, let users double-click on hyperlinks, and support for multiple windows. However, its development halted after the students graduated, even after Berners-Lee travelled to Finland to try to encourage them to continue.

Amazingly, they were unable to find funding to support more development. The enormous commercial potential of a Web browser only became apparent some two years later [March 25], when Marc Andreessen [July 9] met James Clark [March 23]

Celeron Released April 15, 1998

The Celeron was Intel's response to its loss of the lowend chip market to Cyrix and AMD chips [May 26]. Celeron was the brand name for a number of different processors based on faster Pentium [March 22] and Core chips, but the Celeron versions were significantly slower due to having less on-board cache, and by having advanced features disabled or removed.

Today saw the release of the Celeron Convington, which was based on a Pentium II with its secondary cache removed. Substantial numbers were sold at first, but interest faded in the face of its poor performance.

Intel had hired the marketing firm "Lexicon Branding" to come up with the "Celeron" name, after that company's earlier success with "Pentium". The "San Jose Mercury News" described Lexicon's reasoning behind the new name: "Celer is Latin for swift. As in 'accelerate' and 'on,' as in 'turned on.'

Celeron is seven letters and three syllables, like Pentium. The 'Cel' of Celeron rhymes with 'tel' of Intel."

LiveJournal Launched April 15, 1999

Brad Fitzpatrick (1980 -) started LiveJournal as a way of keeping his high school friends updated on his activities, and it soon grew into a blogging service. For example, "Frank the Goat", LiveJournal's mascot in the early years, had his own journal.

Fitzpatrick sold the company to "Six Apart" in 2005, which sold it onto a Russian media company, SUP Media, in 2007.

To this day, LiveJournal is still quite popular in Russia, and the Russian translation of "LiveJournal" became the standard word for blogging in Russia. However, many commentators consider LiveJournal's demise to have occurred in April 2018 when George R.R. Martin (author of "A Song of Ice and Fire", aka "Game of Thrones") announced he was moving his LiveJournal blog to his own website.

Although LiveJournal was an early blogging platform, the first was probably "Open Diary", which opened on [Oct 20] 1998.

Damn Small Linux April 15, 2005

"Damn Small Linux" (DSL) was designed by John Andrews to run on older x86 hardware, available as an ISO file of under 50MB. Tests showed it could run in as little as 16MB of RAM, but was much happier in 128MB. The latest stable version was in 2008, but "Tiny Core Linux" was forked from it, and is actively maintained. "Tiny Core" comes in three variants: the lightest weighs in at just 11MB, which doesn't include a graphical desktop.

For more Linux distributions, see [Aug 15], [July 17], [Sept 15], [Aug 11], [Dec 22], [Oct 20], and [Feb 19].

Google Glass April 15, 2013

Google Glass was an optical head-mounted display in the shape of a pair of eyeglasses. It was released on this day, just ten months after its debut in an extravagant skydiving demo organized by Sergey Brin [Aug 21] at Google I/O [June 27].



A Glass prototype at Google I/O 2012. Photo by Antonio Zugaldia. CC BY 2.0.

Glass displayed information via a small LED display and a partially reflecting mirror. It included a touchpad on the side, a camera with the ability to record video, and the user could issue voice commands, with responses relayed back via bone conduction through a transducer beside the ear.

Google initially only sold Glass to those people it labelled "Glass Explorers", but it released it to the general public the following year.

Despite the controlled rollout, Glass soon started being criticized over privacy and safety concerns. In one of several public relations disasters, a driver in California was ticketed in October for "driving with monitor visible to driver (Google Glass)".

On Jan. 15, 2015, Google announced the end of its "Google Glass Explorer" program aimed at the public, although Glass did eventually return in July 2017, as the "Google Glass Enterprise Edition". This time it was marketed for use in factories,

and companies such as Boeing, GE, and DHL adopted it.

Changes in this new release included a higher resolution camera, extended battery life, faster Wi-Fi and processor, and a red light that turned on when video was being recording. Most significantly, all of the electronics had been repackaged in a "Glass Pod", which could be attached to any Glasscompatible frames, including safety goggles and prescription glasses.