

Oct. 20th

Triode Demoed

Oct. 20, 1906

Lee De Forest demonstrated his three-element electrical vacuum tube, the audion (later known as the triode), to the American Institute of Electrical Engineers.



A De Forest grid Audion. Photo by Gregory F. Maxwell. GFDL 1.2.

It was based on his discovery that a wire mesh placed between the filament and collector plate of a diode [Nov 16] produced a significant amplification of the voltage, which made it possible to communicate weak signals over much greater distances.

Despite the audion's unreliability, this approach paved the way for more sophisticated radios.

First Transatlantic Radio Speech

Oct. 20, 1915

B. B. Webb of AT&T transmitted the first transatlantic radio telephone messages from Arlington, Virginia to the Eiffel Tower in Paris.

Atop the tower, AT&T engineers H.E. Shreeve and A.M. Curtis received the signals (a series of scintillating "hello"s and "goodbye"s), joined by representatives of the French government and the US army radio service.

This event came at just the right time for the tower which was scheduled to be disassembled (it had been built back in 1889). Its designer, Gustave Eiffel, was looking for ways to prevent this

by making the structure useful, and radio communication fitted the bill, especially since France was at war and wireless communication was so important to the military.

However the message sending was only one-way; it was necessary to use a cable line back to the US to confirm that the transmissions had been received.

At the same time, the same signals were sent from Arlington to the US naval base at Pearl Harbor in Honolulu, which gave the experiment a total reach of almost 10,000 miles.

This occasion should not be confused with Guglielmo Marconi's first transatlantic radio message on [Dec 12] 1901 which used Morse code, or Alexander Graham Bell's first transcontinental US phone call on [Jan 25] 1915,

It would be another 11 years before the first two-way call would take place between London and New York. A year later, on [Jan 7] 1927, the first commercial transatlantic telephony service was opened.

Jim "Button" Knopf

("Knopf" is "button" in German)

Born: Oct. 20, 1942;
USA

Died: Oct. 1, 2013

Knopf became one of the fathers of shareware after he wrote a mailing list program (essentially a simple database) to help his local church in Bellevue, Washington. Word of its usefulness got around, and soon he was receiving so many requests for the application that he quit his day job at IBM, and formed Buttonware.

Buttonware released the program as "Easy-File" in late 1982 as "user supported software". He chose this phrase to reflect the optional payment model, and also that user comments drove the software's development. There was no copy

protection on the diskettes. The program originally only ran on the Apple II [June 5], but Knopf soon ported it to CP/M [June 22], and MS-DOS.

"Easy-File" was later renamed "PC-File" as part of Knopf's collaboration with Andrew Fluegelman [Nov 27], the developer of the "PC-Talk" communications software. They adopted similar product names and prices, and agreed to mention each other's software in their documentation. Fluegelman was the first person to call this distribution method "freeware".

A few months later (early 1983), Bob Wallace [May 29] joined the gang with "PC-Write", a word processor, and he coined the term "shareware".

At its peak in the late 1980s, Buttonware had 35 employees and \$4.5 million income annually.

Cockpit Cabinet Patent

Oct. 20, 1975

Atari filed a patent for the first sit-down cockpit-style arcade cabinet. It was designed by Peter L. Takaichi for the company's driving game, "Hi-Way", as a follow-up to "Gran Trak 10", the company's first car-racing game [May 00], where the player had to stand up.

A "Hi-Way" player would sit in a molded-fiberglass seat with a steering wheel, gear-shift, and gas and brake pedals attached to the console. Each cabinet required at least sixteen square feet of floor space.

Serious players soon noted that the developers had missed a trick by not letting a driver 'crash' his car. Hitting other vehicles or suddenly veering off the road only slowed you down.

"Hi-Way" hit the arcades in March 1975, but Atari wasn't granted the patent for it until March 8, 1977 (US D243624).

Atari would release "Night Driver", a more popular first-person cockpit racer, the following year. It added a windscreen to the driving experience.

Project Chess Begins

Oct. 20 ??, 1980

In mid-October, IBM's Corporate Management Committee approved William Lowe's [Jan 15] plan to build the IBM PC. They liked the prototype put together by his "Dirty Dozen team [Aug 8], and his business plan.

The team underwent a corporate makeover, becoming an IBU (Independent Business Unit) codenamed "Project Chess", with its mission to develop "Acorn". The team rapidly expanded to 150 members, and Lowe later remembered that he received more than 500 calls in one day from IBMers interested in joining.

Don Estridge [June 23] agreed to lead the IBU, but only after four conditions were agreed: 1) The normal IBM sales force would not sell the computer because that would add another \$500 to the price to support the company's byzantine infrastructure; 2) The team would not be located in IBM's regular building in Boca Raton; 3) No executives would visit the team; 4) The team's offices would not be linked to IBM's main telephone network.

Software developers received prototypes in boxes lined with lead to block X-rays, and sealed with solder. Also, the unpackaged device had to be kept in a locked, windowless room.

After 11 months – faster than any other hardware product in IBM's history – the IBM PC (the IBM 5150) was announced on [Aug 12] 1981.

Staog Detected

Oct. 20, 1996

Staog was the first Linux virus, and employed no less than three kernel vulnerabilities to gain root privileges. It became memory resident when executed, and thereafter infected any Elf binaries when they were run.

The virus was named after the text string "Staog by Quantum/VLAD" found inside its assembly code. VLAD was the name of an Australian hacker group active in the 1990's, which also created Bizatch, the first Windows 95 virus [Aug 24].

Dot Symphony

Oct. 20, 1998

The "Symphony for Dot Matrix Printers" premiered in Montreal. It had been composed by "[The User]", an art collective consisting of architect Thomas McIntosh and composer Emmanuel Madan. Members of the orchestra included a Juki 6100, an Epson TX-80B [Nov 18], and a Star Micronic Gemini 10X, in a group consisted of between 10-15 performers.

Each printer played a different 'part' comprised of rhythms and pitches generated as a byproduct of printing characters. The program controlling the 35 minute symphony printed around 100 pages of ASCII by the end of the piece.

McIntosh estimated that one minute of dot matrix printer music required two weeks' of design and programming.

Miniature video cameras were installed inside the printers so the audience could watch the printers in motion on large screens.

This wasn't "[The User]"'s first work; that had been "The Silophone" – an attempt to turn an abandoned grain silo into a very large concrete flute. Money problems forced the group to

look to another direction.

Open Diary Launched

Oct. 20, 1998

Open Diary (often abbreviated as "OD") was an online community that was possibly the first example of blogging and social networking. The site was operated by Bruce and Susan Ableson, better known as the DiaryMaster and DiaryMistress.



Logo of Open Diary. (c) opendiary.com

Diaries were indexed by user's age and geographic location, and readers could post comments marked as public, private, or friends-only. Each diary had a Favorites page where the latest posts from the author's friends could be stored.

In 2001, two diarists memorably posted while working at the McMurdo Station in Antarctica, making OD the first online community across all seven continents.

At its height, Open Diary hosted more than five million diaries, but closed down on Feb. 7, 2014.

Ubuntu

Oct. 20, 2004

South African Mark Shuttleworth released the first version of the Ubuntu distribution of Linux (confusingly numbered 4.10, but with the easy-to-remember codename "Warty Warthog"). "Ubuntu" is a Zulu word embodying the idea that "a person is a person only through other people."

Ubuntu was based largely on the popular Debian Linux distribution [Sept 15], but made easier to install for users new to

Linux. Rather controversially, Ubuntu also included proprietary software unlike Debian which focuses on free (as in freedom) applications only.

GNOME [March 3] was Ubuntu's default desktop environment until version 11.04, when it was replaced by Unity, a sporty, modern GUI that made GNOME look a little like yesterday's news.

Proud GNOME developers set about implementing changes, and Ubuntu 18.04 was persuaded to dump Unity in favor of GNOME 3. The Unity developers vowed to carry on.

Meanwhile, Shuttleworth became the second "space tourist" [March 26].



Mark Shuttleworth (2009). Photo by Nitot. CC BY-SA 3.0.

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

Intel Outside

Oct. 20, 2005

The original Intel logo, featuring a dropped 'e', was created in [July 18] 1968 by founders Robert Noyce [Dec 12] and Gordon Moore [Jan 3]. In 1991, the 'Intel Inside' motto [July 00] was added.

On this day, Intel held a meeting of its top 300 managers in Santa Clara. Chief Marketing Officer Eric Kim astounded the audience by announcing radical plans to discard both "Intel Inside" and the dropped 'e'. However, in a move that calmed nerves, wise

and kind Andrew Grove [Sept 2] gave his full support to these changes.

The new logo revealed at the start of 2006 was a lowercase "intel" inside an oval (technically called the "swoosh"). The "inside" had been demoted to outside the oval, and in some variants the slogan "Leap ahead" was included.

The change may have had something to do with the release of the Apple MacBook Pro featuring Intel Core Duo chips [Jan 10]. Some commentators wondered if Apple had wanted to avoid upsetting its more sensitive users by displaying "Intel Inside" on the case.

Blind Man Driving

Oct. 20, 2015

One of Google's first fully autonomous vehicles, with no steering wheel or pedals, drove on public roads in Austin, Texas. Steve Mahan, an Austin resident who has been blind since 2004, was the (voluntary) passenger in the world's first car trip with no means of human intervention (short of screaming that is).

After returning safely, Mahan reported, "It is like riding with a very good driver." However, he didn't mention that the car's speed was capped at 25 mph.

The cute-looking Firefly vehicle became a recognizable feature around Mountain View during the mid 2010's. However, it was retired in 2017, when lead industrial designer YooJung Ahn and lead systems engineer Jaime Waydo joined Chrysler to work on its self-driving Pacifica minivan.

Shortly before, in Dec. 2016, Google had announced that it was spinning off the six-year-old project into a standalone business called Waymo, which stands for "a new way forward in mobility".
