Jan. 27th

William K. English
Born: Jan. 27, 1929;

Lexington, Kentucky
Died: July 26, 2020

English and Douglas Engelbart [Jan 30] share credit for creating the first computer mouse [Nov 14]. English built the initial prototype in 1964 based on Engelbart's notes, and was its first user.

English was Engelbart's chief hardware architect. He led the 1965 NASA project to find the best way to select a point on a display; perhaps not unsurprisingly, the mouse was deemed the winner. Other competitors included the joystick and light pen.

English was a prime mover at Engelbart's "The Mother of All Demos" event on [Dec 9] 1968. He figured out how to connect the terminal in the San Francisco Civic Auditorium to the host computer back at SRI, 30 miles distant, and how to reliably transmit audio and video between the two places.

English moved to Xerox PARC [July 1] in 1971, where he managed the Office Systems Research Group. He developed one of the first trackball mice, replacing the standard wheel mechanism. However, the first trackball device was probably the Telefunken Rollkugel [Oct 2].

Another change to Engelbart's mouse design inspired by English was the number of buttons. The Xerox Alto's [March 1] mouse had three buttons, as in Engelbart's original, but testing showed that users found them confusing. As a result, the Star [April 27], the first machine that Xerox brought to market, had just two buttons on its mouse. Microsoft followed suit [May 2], but Apple opted for a single button, first on the Lisa [Jan 19] and then the Mac [Jan 24].

SSEC
Jan. 27 (24 ??), 1948

IBM's Selective Sequence Electronic Calculator (SSEC) was built at its Endicott facility in 1946-47 under the direction of Wallace Eckert [June 19], Robert (Rex) Seeber, Frank E. Hamilton, and other Watson Scientific Computing Lab [Feb 6] staff.

It contained 21,400 relays, 12,500 vacuum tubes, and could performed 14-by-14 decimal multiplication in one-fiftieth of a second, and division in one-thirtieth of a second, making it around 250 times faster than the Harvard Mark I [Aug 7].

The IBM SSEC (with columns). Frank da Cruz. (c) columbia.edu

The SSEC's nickname was "Poppa" because of the noise generated by its relays when it was running.

One mightily contentious aspect of the SSEC's design is whether it should be classed as a programmable calculator or as the first stored-program computer. Most historians assign the latter title to the Manchester Baby [June 21], but Seeber had designed the SSEC to treat instructions as data, so they could be modified and stored under program control. Indeed, IBM filed a patent based on the SSEC on Jan. 19, 1949, which was later upheld as evidence supporting the machine's stored program ability. On the negative side, some aspects of the SSEC's operation still used plugboards.

Seeber and Hamilton had tried to persuade Howard Aiken [March 8] to make the Harvard Mark II a stored program machine. Aiken wasn't interested, but Thomas Watson Sr. [Feb 17] was persuaded with regards the SSEC, especially since he was still upset over his altercation with Aiken during the dedication of the Harvard Mark I.

The SSEC occupied three sides of a large room on the ground floor of IBM's headquarters at 590 Madison Avenue in NYC, where it was visible to people walking by on the street. Herbert Grosch [Sept 13] estimated its dimensions to be 60 + 40 + 80 feet, the length of about half a football field.

Watson Sr. liked the display space except for three large columns in the center of the room which he wanted removed. Unfortunately, they supported the rest of the building, so had to stay. Instead, most photos of the SSEC, including those in the brochure handed out at the dedication, were retouched to remove the offending columns.

The SSEC was dedicated on this day, and remained in service for four years. During that time, it produced the moon-position tables later used for plotting the course of the 1969 Apollo mission [July 20] . One of its visitors during 1949 was a young John Backus [Dec 3].

The SSEC had a significant impact on the popular view of computers. For example, it was the subject of a cartoon by Charles Addams published on the cover of *The New Yorker* magazine on Feb. 11, 1961: a kindly SSEC prints a Valentine's Day card for its elderly female operator.

The SSEC was decommissioned in 1953, and the space taken over by the new IBM 701 Defense Calculator [April 7], the company's first electronic computer (despite the name).

Cult of the Dead Cow
Jan. 27, 1997

In June 1984, three BBS administrators – "Grandmaster Ratte" (aka "Swamp Rat"), Franken Gibe, and "Sid Vicious" (not Simon John Ritchie, who was dead by then) – founded the hacker group, "Cult of the Dead Cow" (cDc). The meeting was held at the Farm Pac slaughter house in Lubbock, Texas. They began publishing the "Cult of the Dead Cow", quite possibly the first underground eZine.

The cDc website went online on this day, and now includes an archive of the eZine, the "Cow Feed" blog, downloads, and merchandise.

cDc is credited with coining the terms "hacktivism" and "31337" (an alternative spelling of "Eleet" or "Elite"), and writing the Back Orifice remote administration tool (often shortened to BO); the name is a pun on Microsoft's BackOffice Server. BO lets a hacker take control of a MS Windows machine from a remote location. cDc also claimed responsibility for the nefarious "Good Times" virus [Nov 15].

cDc member Jesse Dryden (aka "Drunkfux") started HoHoCon in Dec. 1990, which is often said to be the first modern hacker conference, in that both journalists and law enforcement officers are welcome.

In Dec. 1993, cDc was named "Sassiest Underground Computer Group" by *Sassy* magazine, a now-defunct teen magazine, aimed at female fans of alternative and indie rock music.

On Sept. 4, 2007, cDc Communications published "The Book of Cao: Enlightenment Through a Poke in the Eye", describing the group's spiritual beliefs. It is 168 pages in length.

The Farm Pac slaughterhouse, where it all began, burnt down in 1996, but found later use as a haunted house during several Halloweens.

Jon Blake Cusack 2.0
Born: Jan. 27, 2004;
Holland, Michigan

Jon Blake Cusack decided that the practice of adding "Junior" or "II" after a boy's name was too old-timey, so named his new son Jon Blake Cusack 2.0

Cusack got the idea from the movie, "The Legend of 1900" (1998), in which an abandoned baby is given the name 1900 to celebrate the year of its birth.

After little 2.0 was born, Cusack sent a celebratory e-mail to family and friends, including the comment, "there's a lot of new features from Version 1.0 with additional features from Jamie [his wife]".

Western Union Ends Telegrams
Jan. 27, 2006

After 145 years of gallant service, dating from 1851 when it was the Mississippi Valley Printing Telegraph Company, Western Union stopped sending telegrams today.

By the time of the US Civil War, it was running a coast-to-coast network. During the 1920's, it delivered more than 200 million telegrams every year. However, the first telegram service, between Washington and Baltimore, was set up by Samuel Morse on [May 24] 1844.

Although Western Union's service is gone, there are still a few companies in the business. International Telegram (aka iTelegram) inherited Western Union's telex and cablegram network, and still manages to deliver 20 million telegrams every year. One reason for the telegram's continued, tenacious existence is the legal requirement to retain a copy of the message for seven years.

e-Day
Jan. 27 (every year)

e-Day has nothing to do with eCommerce, but instead celebrates Euler's number, e (2.718281828 approximately). However, today is e-Day only for people in countries following the day/month calendar format. In the US, e-Day would be Feb. 7, which was especially appropriate in 2018 when the date was 2/7/18, its first four digits. The Europeans' turn will come in 2082, when they'll surpass the US with five digits.

Leonhard Euler. Portrait by Jakob Emanuel Handmann (1753), Kunstmuseum, Basel.

The first large-scale computation of e was made by George Reitwiesner in 1949 at the behest of John von Neumann [Dec 28]. Reitwiesner used the ENIAC [Feb 15] to compute the value to about 2,500 decimal places, using its factorial series:

$$e = \sum_{n=0}^{\infty} \frac{1}{n!}$$

In 1952, F. Gruenberger extended the computation to 3,000 places on an IBM 602A [June 00].

In 1978, Steve Wozniak [Aug 11] calculated e to 116,000 places on an Apple II [June 5], and wrote an engaging article about his 6502 code in the June 1981 issue of BYTE magazine.

One popular approach employs the Spigot algorithm, which

requires only fixed-precision operations. A.H.J. Sale wrote about it in the Aug. 1968 issue of *The Computer Journal*, complete with an exciting ALGOL 60 algorithm [Jan 11].

Donald Knuth [Jan 10] utilizes e as the version numbers of his METAFONT software. Successive versions approach e: 2, 2.7, 2.71, 2.718, and so on.

Google's IPO filing [Aug 19] contains hidden references to e and $\sqrt{2}$ [May 5]. Google was also responsible for a July 2004 job interview billboard that appeared near various US computer science centers. It read "{first 10-digit prime found in consecutive digits of e}.com." This clue led to a website which offered another puzzle. Solving that one led to Google Labs and an invitation to submit a résumé.

For more math constants, see [March 14], [May 5].

Plymouth Hoe Offensive
Jan. 27, 2021

The Guardian newspaper reported on how Facebook [May 18] users in the UK city of Plymouth were having problems writing its faur environs. In particular, Plymouth Hoe, the spot where Sir Francis Drake reputedly finished a game of bowls before heading out to fight the Spanish Armada. The name derives from the Anglo-Saxon word hoe - a sloping ridge shaped like an inverted foot and heel.

The administrator of one Plymouth Facebook page warned its users to be careful. "Just a quick post to say anyone living Plymouth h o e, please don't write it as one word. Facebook are saying it's harassment and muting people and giving them a Facebook ban."

A Facebook spokesperson later said: "These posts were removed in error and we apologise to those who were affected. We're looking into what happened and will take steps to rectify the error."

This recalls a similar problem Facebook had earlier in January when a user in Brighton posted a photo of a bus, which had the "Devil's Dyke" destination displayed on its front. The person reported, "I got 48 hours in Facebook jail for posting a photo of a bus."

The UK seems to have a plethora of troubling place names that may upset Facebook in the future, including Cockplay in Northumberland, Fanny Barks in Durham, Honey Knob Hill in Wiltshire, Clap Hill in Kent, Shaggs and Droop in Dorset.

For more filtering problems, see [April 9] and [Jan 24].