Dec. 25th

Claude Chappe

Born: Dec. 25, 1763;

Brûlon, Sarthe, France Died: Jan. 23, 1805

Chappe and his four brothers developed a practical system of semaphore relay stations, that eventually spanned all of France. Their device used two metal arms connected by a cross-arm. Each arm could be set in one of seven positions, and the crossarm offered four more, allowing the system to support a 196combination code.

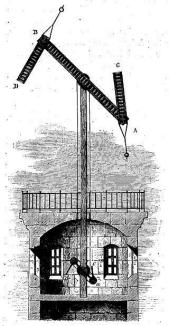


Fig. 19. - Télégraphe de Chappe.

Chappe's telegraph. Drawing by Louis Figuier, 1868.

The first successful message was sent on March 2, 1791: "si vous réussissez, vous serez bientôt couverts de gloire" (if you succeed, you will soon bask in glory) transmitted from Brulon to Parce, a distance of ten miles.

Each relay station was placed around 12 to 25 km apart, and came equipped with a telescope to help the operator observe the other stations in the line.

Chappe initially called his invention the tachygraph ("fast writer") but the army preferred telegraph ("far writer"), as coined by the French politician André François Miot de Mélito.

The first telegraph line from Paris to Lille was ready in July 1794, consisting of 23 stations. The first official message was sent on Aug. 15, concerning the French army's recapture of Le Quesnoy (about 200 km north of Paris) from Austria. The government received the good news just one hour after the battle's end and over ten hours before a courier on horse-back arrived. Thus the telecommunications era had begun. Hacking soon followed (see [March 14]).

Fredrik Rosing Bull Born: Dec. 25, 1882;

Oslo, Norway Died: June 7, 1925

Bull patented his first punched card machine on July 31, 1919, and it soon became a success throughout Europe as it was considered technically superior to Hollerith's machine [Jan 8]. Over the following years, Bull made several improvements to automate and speed up the device's processing.

His patents became the basis for the French company, Groupe Bull, which has grown into an information technology behemoth operating in over 100 countries. From the 1960's to the 1980's, it had ownership relations with General Electric, Honeywell [March 25], and NEC, and with Motorola and France Télécom more recently.

Stanley S. Veit Born: Dec. 25, 1919;

New York City Died: July 29, 2010

Viet was the computing editor at *Popular Electronics* [Dec 19], and that magazine's announcement of the Altair 8800 in the Jan. 1975 issue inspired him to open "Computer Mart" in the spring of 1976. Although it was the first store on the East Coast, Dick

Heiser's "The Computer Store" [July 15] was the very first, and the second was Paul Terrell's "Byte Shop" [Dec 8]. In any case, Viet's rapidly became a hangout for NYC computer geeks.

In 1977, Veit and Les Solomon co-authored one of the first personal computing books, "Getting Involved With Your Own Computer," although David Ahl's [May 17] "101 BASIC Computer Games" (1973) was probably the first.

A letter from Veit criticizing the editorial content of *Computer Shopper* [Nov 15] in 1983 led to his being invited to become its first editor-in-chief . He quickly turned it into the physically largest magazine in the world.

His 1993 book, "Stan Veit's History of the Personal Computer", is still a fun read.

Richard Greenblatt Born: Dec. 25, 1944; Portland, Oregon

Greenblatt and Bill Gosper [April 26] are considered the cofounders of the Lisp-and-AI hacker community. Greenblatt and Stewart Nelson were also the main implementers of the Incompatible Timesharing System (ITS [July 00]) in MIT's AI lab

Greenblatt wrote "MacHack VI" in the late 1960's, the first program to compete successfully in a human chess tournament. and considered to have the playing skills of a strong amateur [Oct 15]. It ran in just 16 KB of memory, and evaluated about 10 positions per second. The software built upon ideas from the Kotok-McCarthy [Nov 22] chess program. The MacHack name came from MIT's Project MAC [July 1]. and the number VI referred to the PDP-6 where it ran. MacHack went on to inspire Martin Gardner's [Oct 21] MacHic spoof in the April 1975 issue of Scientific American [Aug 28].

Greenblatt was the main developer of Maclisp, which was derived from LISP 1.5 [Aug 17], and later became the primary designer of the MIT LISP machine, a computer hardwired to support Lisp. He founded Lisp Machines, Inc. in 1979 to commercialize this architecture, but dedicated AI hardware suffered during the cruel AI Winter [Oct 28] of the 1980's and the onslaught of cheap microcomputers.

TV-8-301 Released Dec. 25, 1959

Sony's TV-8-301 was the first fully transistorized black and white television, and also portable, with a bay in the back for two 6 volt lead acid batteries, and a small eight-inch screen.

It was the first direct-view transistorized TV (rather than being projection-based), and the first Japanese set to be sold in the US. It also featured the first use of the Sony logo.

Unfortunately, it was prone to malfunction, and earned the nickname "frail little baby". Two years later, the TV5-303, a smaller, more reliable, model became a huge hit.

Sony also produced Japan's first transistor radio [Aug 7] in 1955, but Texas Instruments' Regency TR-1 was the world's first [Oct 18].

Heathkit EC-1 Launched Dec. 25, 1959

At just \$400, the Heathkit [July 00] EC-1, which was sold in kit or pre-assembled form, was probably the first analog computer that a home user might buy. Certainly, the price helped it to become a mainstay of industry and universities. The Heath company [July 00] had been selling analog computers, albeit more expensive ones, since 1956.

The EC-1 could solve a wide range of mechanical and mathematical problems thanks to its nine DC op-amps, three input power supplies, several potentiometers, relay contacts, high precision resistors and capacitors, and a built-in oscillator. It was housed in a tough steel case, measuring 19.75 x 11.5 x 15 inches.



Cover Image from the Heathkit EC-1 Manual (1959). Heath Company.

The advertising materials stated that the EC-1 could solve "problems as complex as fluid flow, damped harmonic motion, and the flight of a projectile in a viscous medium." These were 'programmed' in the usual analogue way, by inserting wires into the EC-1's control board sockets to chain the necessary components together.

Christmas Cards Dec. 25 ??, 1971

In Dec. 1971, an operator at the Arizona State Finance Center in Phoenix discovered that one of the center's key computer tapes was missing. Fortunately, everything was backed up on punched cards. However, when the sysadmin searched through these backup cards, he discovered that over two thousand had been folded. gilded, and used as Christmas tree ornaments.

This horrifying story probably refers to the financial services unit at ASU (Arizona State University), but there's no mention of it in the university's official history.

The Policeman's Beard Is Half Constructed Dec. 25, 1984

The Racter software (short for raconteur) generated English language prose as demonstrated by the book "The Policeman's Beard Is Half Constructed" which was composed by the program. *PC Magazine*'s review, published on this day, concluded that the book was "whimsical and wise and sometimes fun."

Racter was implemented by William Chamberlain and Thomas Etter and, according to Chamberlain's introduction in "The Policeman's Beard", was written in "BASIC on a Z80 micro with 64K of RAM".

Mindscape, Inc. also released an interactive version of Racter for MS-DOS, the Amiga [July 23], and the Apple II [June 5]. Sadly, most users found that it generated text that was considerably less sophisticated than anything in "The Policeman's Beard".

A taster of Racter's writing:

"...You are a person. a human being. I am silicon and epoxy energy enlightened by line current. What distances. what chasms. are to be bridged here? Leave me alone. and what can happen? This..."

For more literary shenanigans with computers, see [Feb 1; Aug 1; Aug 22; Sept 9; Sept 11; Oct 26].

First Web Page Dec. 25 (or 20 or 24 ??), 1990

Tim Berners-Lee [June 8] and Robert Cailliau [Jan 26] had received the go-ahead from CERN for their project, "WorldWideWeb: Proposal for a HyperText Project" [Nov 12].

By Christmas 1990, Berners-Lee had built all the tools necessary to make the Web a reality:

- A combined web browser and HTML editor called WorldWideWeb;
- A web server called CERN httpd.

The browser/editor relied on NeXTSTEP for its GUI, and both the browser and server ran on Berners-Lee's NeXTcube [Sept 18]. To prevent it being accidentally switched off, the computer had a hand-written label in red ink attached to it: "This machine is a server. DO NOT POWER IT DOWN!!"

The very first website, which naturally described the WorldWideWeb project itself, was supposedly published on this day according to a "901225" date on the page. However, Berners-Lee later wrote that this was an example of whimsy, and the page had actually been prepared before CERN closed for Christmas. A now defunct CERN website about the birth of the Web sets the date as Dec. 20th, but I've also seen the 24th mentioned!

Berners-Lee had considered several names for the browser, such as "The Mine of Information" and "The Information Mesh". In fact, he later dropped "WorldWideWeb" in favor of "Nexus" to avoid confusion between the browser software and the Web itself.

Although today marked the appearance of Web page no. 1, the number only really started increasing after Berners-Lee gave the programs to a number of people in the high energy physics group at CERN in March 1991.

The WorldWideWeb team also grew during 1991 to include Jean-François Groff who rewrote parts of the browser in more portable C, and Nicola Pellow who wrote the Line Mode Browser [Jan 12]. Groff's C code eventually morphed into Henrik Frystyk Nielsen's libwww, which helped other people develop their own browsers.

The CERN httpd server was modified several times by Berners-Lee, Ari Luotonen and Henrik Frystyk Nielsen. For example, it was ported to other versions of UNIX, and officially released as version 0.1 in June 1991.

The first public summary of the Web seen outside of CERN was sent to the alt.hypertext newsgroup on [August 6] 1991, but it was nearly two more years before the browser's source and Web protocols were released into the public domain [April 30].

In 2019, the WorldWideWeb browser was put back online, accessible at https://worldwideweb.cern.ch/

Shimomura"s Kung Fu Dec. 25, 1994

The computer of security expert Tsutomu Shimomura was hacked, and a software disassembler he had written for cell phones was stolen.

Eventually it was discovered that an Israeli hacker was responsible, but, initially Kevin Mitnick was fingered for the heist, and Shimomura decided to help the FBI track him down. Mitnick was arrested on [Feb 15] 1995.



I very much doubt if your Kung Fu is stronger than mine (1973). Photo by National General Pictures.

During the FBI investigation, Shimomura received several prank calls teasing his hacking abilities, including from someone claiming that "My Kung Fu is stronger than yours," a phrase that became quite popular in later years. In "The X-Files" episode, "Unusual Suspects" (Nov 16, 1997), the "Lone Gunmen" hackers are heard to say it, and it's also uttered in the film "The Core" (2003).