June

Alick Edwards Glennie

Born: June ??, 1925;

West Ham, London, UK
Died: ??, ?? 2003 (or 2002)

Many people regard Glennie's Autocode [Dec 14], completed for the Ferranti Mark 1 in 1952, as the first compiler (although some plump for A-0 [May 2]).

Glennie was also the first person to play a game of computer chess, against a program devised by Alan Turing [June 23], albeit one executed via pen and paper, not on actual hardware. The match took several weeks to complete, and Glennie was the victor. At this time, Glennie was involved with Turing on several projects, including the Manchester Mark 1 [June 16].

In the early 1960's, Glennie worked at the Atomic Weapons Research Establishment (AWRE) at the former RAF Aldermaston airfield where he developed several FORTRAN compilers, including ones for the IBM 7090 [Nov 30] and the STRETCH [April 26].

Pygmalion's Spectacles

June 1935

US sci-fi author Stanley G. Weinbaum published his short story "Pygmalion's Spectacles" in the June issue of *Wonder Stories*, making it the first fictional presentation of virtual reality (VR) technologies.

Professor Albert Ludwig has invented a pair of goggles which enable "a movie that gives one sight and sound [...] taste, smell, and touch. [...] You are in the story, you speak to the shadows (characters) and they reply, and instead of being on a screen, the story is all about you, and you are in it."

The first real-life VR devices were probably Morton Heilig's [Dec 22] Telesphere mask (1958) and Sensorama (1961).

Turing's Buried Treasure

June 1940

Between Sept. 4, 1939 and the summer of 1944, Alan Turing [June 23] lodged at *The Crown Inn*, Church End Road, Shenley Brook End, a village to the west of Bletchley [Aug 15]. The pub is now a private home called Green View, and overlooks a charming pond and small park.

The park opposite the former Crown Inn. Photo from Google Earth. Nov. 2020.

In 1940, alarmed by the prospect of an imminent Nazi invasion, Turing converted £250 into two silver ingots weighing nearly 150 lbs. He loaded them into an old pram at his lodgings, and carted it off into the nearby countryside where he buried the bars.

Unfortunately, when Turing went hunting for the ingots after the war, the landmarks had changed and he was unable to find them, even after employing a metal detector. He searched repeatedly, in 1944, 1946, and 1952, but the silver has never been found.

In 2014, the University of Manchester [June 16] held a cryptography competition to coincide with the release of the movie "The Imitation Game" [Nov 28]. Players had to decipher three clues to find silver on a map of Bletchley.

The game has long since finished but the clues are still online at `http://www.maths.manchester.ac.uk/cryptography_competition_the_imitation_game/index.php?loc=thecodes`

IBM 604 Announced

June 1948

The IBM 604, "Electronic Calculating Punch." was the first mass-produced commercial electronic programmable calculating device, and around 5,600 were built during its ten-year lifetime. While not a stored-program machine, it did employ a plugboard that could support up to forty (and later sixty) instruction steps.

Most of the circuitry was based on the 603 "Electronic Multiplier" but repackaged in small one-tube pluggable units, which made the device easier to manufacture and service. The 604 also reflected the slowly changing culture in IBM towards electronics, away from the purely electromechanical.

The 603 was also used as the arithmetic unit in the IBM Selective Sequence Electronic Calculator (SSEC [Jan 27]) released in 1948.

Muriel Tramis

Born: June ??, 1958;

Fort-de-France, Martinque

Tramis wrote and directed numerous hit games at Coktel Vision in France, and is considered to be the first black female video game designer.

Tramis and Patrick Chamoiseau based Méwilo, the 1987 Atari [June 27] hit, on Martinique history. The story takes place in Saint-Pierre on May 7, 1902, at the time of the eruption of Mount Pelée. She also co-created the Gobliiins series with Pierre Gilhodes, which sold almost 1.5 million copies in 1991.

"Lost in Time" (1993) was promoted as the first interactive

adventure using full motion video technology, although there had been earlier games that utilized motion capture [March 4; Oct 3].

She was awarded the Légion d'Honneur on July 14, 2018, making her the first woman and second game designer to receive that distinction (David Cage was the first). For some other recipients, see [March 7; March 25; May 5; Oct 28].

Full Chess

June 1958

Bernstein Chess was the first software to support a complete game of chess. It was developed during 1957 on an IBM 704 [May 7] by chess player and IBM programmer, Alex Bernstein, with advice from Arthur Bisguier, another IBM employee and an international chess grandmaster.

It was able to search four levels deep into a minimax tree in around eight minutes, and considered the seven most plausible moves for each position. More details can be found in the June 1958 issue of *Scientific American* in an article by Bernstein and Michael de V. Roberts.

Bernstein Chess, with additional routines written by John McCarthy [Sept 4] and Paul W. Abrahams, became the successful Kotok-McCarthy chess program [Nov 22].

CDC 160-A

June 1960

The first machine in the CDC 160 series was released, reportedly, designed by Seymour Cray [Sept 28] over a single (long) three-day weekend.

It was originally intended as an IO device for the larger, more expensive CDC 1604 [Oct 16] so it could focus on number crunching. However, the 160 quickly found a useful niche as a platform for training programmers since it included a paper-tape reader and a punch, and an IBM Electric typewriter that could act as a terminal.

Control Data 160-A. Photo by Jitze Couperus. CC BY 2.0.

It was also compact enough to fit into a desk (with a separate tape drive), and so has been claimed as the first minicomputer. However, most historians prefer to class the CDC 160 as a large mini, and usually award the title of "first minicomputer" to DEC's PDP-1 [Nov 00].

The Paper Clip Computer

June 1967

The textbook, "How to Build a Working Digital Computer", by Edward Alcosser, James P. Phillips, and Allen M. Wolk was published by Hayden.

As the title suggests, it describes how you can assemble a computer from objects lying around the house, such as paper clips for the switches, and a tin can for drum memory.

Teenagers Mark Rosenstein and Kenny Antonelli constructed the "Emmerack" in 1972 based on the book's plans (but using slide switches instead of clips), and there's a modern build on YouTube at `https://www.youtube.com/watch?v=TJFXEny-Pt0`. The schemata were also the basis of the CT-650 by Irving Becker (see `http://www.evilmadscientist.com/2013/paperclip/`).

Woz' First Computer

June 1971

After withdrawing from De Anza College, Steve Wozniak [Aug 11] and neighbor Bill Fernandez [Feb 6], a high-school sophomore, built their first computer using parts discarded by local companies. Another version of the story has Wozniak surreptitiously obtaining the parts from a company called Tenet where he was working as a programmer.

The result was dubbed the "Cream Soda Computer," after the beverage they consumed in large quantities while building the device in the Fernandez family garage.

Woz later wrote: "The cream soda computer was before useful microprocessors so I created the processor itself out of TTL chips. This was an era where shift registers, counters, ALU's were around in 4-bit flavors. In the end, I added chips to play with this simple 8-bit processor, just like the Altair [Dec 19], although I had no expansion bus that I can remember. "

The computer came to a sad end when an eager reporter from the *Peninsula Times* newspaper stepped on the power supply cable.

Fernandez later introduced Wozniak to classmate, Steve Jobs [Feb 24]. Bill correctly assumed that their shared interest in electronics (and love of practical jokes) would overcome their difference in ages; Woz was five years older than Jobs (21 vs. 16).

Resource One Gets a Computer

June 1972

Project One was a technology commune located in a former candy warehouse in San Francisco, which operated from 1971 to 1980 and pioneered the "warehouse community"

concept in "The City by the Bay". It housed artisans, sculptors, filmmakers, and technology organizations such as Resource One – the people's computer center

Resource One's president, Pam Hardt, somehow secured the "long term loan" of a Scientific Data Systems SDS 940 [Nov 30], and enough money to purchase a state-of-the-art 50 MB hard disc, the size of two refrigerators. The computer had previously been used at Stanford, including for the programming of Shakey the Robot [Dec 7]. Before that, it had been employed by Douglas Engelbart during the "The Mother of All Demos" [Dec 9].

The machine arrived at Resource One in April 1972 and was installed in just three days with the help of techies from Xerox PARC [July 1] and the Berkeley Computer Corp [Feb 26]. L. Peter Deutsch [Aug 7] loaded the OS, and Lee Felsenstein [April 27] was appointed the unofficial chief engineer.

The SDS 940 saw use as the hardware behind Community Memory, the first public bulletin board system [Aug 8].

Kentucky Fried Computer

June 1976

The Kentucky Fried Computer (KFC) company was formed in Berkeley by Mark Greenberg and Charles Grant to sell IMSAI computers [Dec 16]. The business' motto was "A computer in Every Pot" which made a certain sense until impending litigation (by guess-who) forced them to change the company's name to North Star Computers.

Their first home-grown product was a floating point math board, followed by an inexpensive floppy disk system, which probably meant that their NorthStar Horizon machine was the first to include built-in floppy drives. It was also one of the first to offer a hard drive, called the HD-18 since it offered a staggering 18 MB on an 18" disk.

The Horizon is also one of a select few computers ever sold in a lovely wooden cabinet [April 16; May 2; Oct 00]. It was probably a fire hazard, and later versions switched to an all-metal case.

TMS9900 Introduced

June 1976

The Texas Instruments [Oct 1] TMS9900 was probably the first commercially available, single-chip 16-bit microprocessor, and was employed in the TI-99/4 and TI-99/4A home computers in 1979 and 1981 [June 21].

One drawback of the chip upon its release was the lack of suitable 16-bit peripherals to attach to it. Nevertheless, many thought it should have out-sold the Intel 8086 [June 8] which only became available some two years later. The main problem proved to be a lack of support from TI itself. Walden C. Rhines later called it "Texas Instruments' Biggest Blunder".

EIES Reported

June 1978

Murray Turoff [Feb 13] published "The EIES Experience: Electronic Information Exchange System," in *The Bulletin of the American Society for Information Science*, although he had been working on the system since 1974.

EIES (pronounced 'eyes') was an early online conferencing system that supported both real-time and asynchronous communication. This made it one of the earliest instances of groupware, if not the first, and some users contend that EIES coined the groupware term.

At its peak EIES had more than 2,000 subscribers, including government agencies, large corporations, and educational institutions. However, it wasn't all business meetings; there were diversions such as the "EIES Soap Opera".

Howard Rheingold has called EIES "the lively great-great-grandmother of all virtual communities". Apparently, Whole Earth editor-in-chief Stewart Brand [Dec 14], was influenced by EIES to develop The WELL [April 1].

Another contender for the first groupware system is PLATO Notes [July 00], created by David R. Woolley in 1973.

Moon Patrol Released

June, 1982

Moon Patrol is usually credited with introducing parallax side-scrolling into arcade games. The idea is that the foreground and background terrain move at different rates, giving the illusion of depth.

The game lets a player control a moon buggy, which must avoid obstacles such as craters and mines during its travels, while also shooting at UFOs and tanks.

Another contender for first parallax side-scroller is Taito's Jungle Hunt, released in the same year, but probably in August. The player is a jungle explorer sporting a pith helmet and stylish safari suit, who swings through the jungle on vines. The game was known as Jungle King in early releases, but the character was deemed to look too much like Tarzan, and Edgar Rice Burroughs' estate filed a lawsuit, and hence the fashion makeover.

MPC 1600 Released

June 1982

The MPC ("Multi Personal Computer") 1600-1 was probably the first IBM PC clone [Aug 12].

It was designed by David Howse at Columbia Data Products (CDP) based on the IBM 5150, except that its BIOS was developed by "clean room" reverse engineering to avoid copyright infringements. This "clean" approach was later adopted by the makers of the Compaq Portable [Nov 4], and by Phoenix Technology's PC ROM BIOS [July 10].

This method was only possible because IBM had kindly published its bus and BIOS specifications. They had (wrongly) assumed that this would only encourage the add-on market.

Indeed, the MPC was superior to the IBM original in some ways. It came with 128 KB of RAM compared to the IBM's 64 KB. It also had eight expansion slots, including ones for a video card and a floppy disk drive. IBM's PC only had five expansion slots.

Age of Aquarius

June 1983

Mattel's Aquarius is often considered one of the biggest failures in the history of home computers, staying in production for a mere four months.

It featured a Zilog Z80 [March 9] with 4KB of RAM, and a subset of Microsoft BASIC [Nov 18] in ROM (e.g. there was no FOR-NEXT statement). When BASIC was running only 1.7 KB remained for other programs, and graphics were limited to 128 glyphs included in the character set.

Internally, Mattel engineers dubbed it "the system for the seventies".

When Mattei first demonstrated the Aquarius at a trade show, employees had to cover one of the keys with masking tape since pressing it would reboot the computer and wipe all the user's data.

The Mattel Aquarius. Photo by Evan-Amos.

David Ahl [May 17] wrote of the Aquarius: "a machine so cheesy, they should have supplied rubber gloves to wear while using it"

The Electronika BK0010

June 1984

The Electronika BK was a series of 16-bit PDP-11-compatible [Jan 5] home computers developed by the NPO Scientific Center, the leading microcomputer design team in the Soviet Union. The main designers were A.N. Polosin and S.M. Kosenkov, and became the only government approved Soviet home computer design in mass production at the time. BK (БК) is the Russian abbreviation for "бытовой компьютер" , meaning domestic (or home) computer.

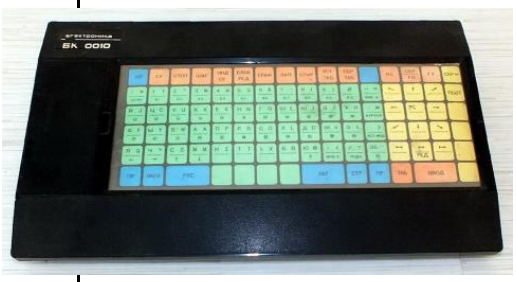
The first machine in the series, the BK0010, saw wide release from mid-1984 (although a few dozen appeared in 1983), and was based on the К1801ВМ1 (a Soviet LSI-11-compatible CPU). It has been claimed as the world's first home 16-bit PC. That is, it had a 16-bit processor, 16-bit RAM, 16-bit ROM, and a 16-bit video controller,

It sold for about 600–650 roubles, which was costly, but affordable as the average Soviet monthly wage then was about 150 roubles. Between 1986 and 1988, Soviet schools received about 60,000 BK-0010s.

It was a bare-bones machine, with no peripherals or programming tools. The machine came with a magnetic tape with several programming examples written in BASIC and FOCAL. The ROM included a simple program to enter machine code, and the BASIC and FOCAL interpreters.

Hobbyist quickly filled this software niche, porting several tools from the more powerful, but much more expensive, DVK and UKNC PCs, which were PDP-11-compatibles aimed at the business and educational markets.

Most owners expanded the built-in RAM to at least 64 KB, which allowed easier software porting, and often included a floppy drive controller. Games and demoscene communities flourished, as the machine's poor graphics were offset by a powerful CPU. It supported two graphic video modes, high-resolution (512×256, monochrome) and low-resolution (256×256, 4 colors).



The Electronics BK-0010. Photo from the Russian Virtual Computer Museum.

The BK0010 came with a flat membrane keyboard printed on colored paper covered with a film, which was not much liked. The follow-up machine, the BK-0010-01, was essentially the same hardware, but with a conventional keyboard and a Vilnius BASIC p-code compiler in ROM.