

Jan. 12th

Andrew (Andrey) Vasily Haeff

Born: Jan. 12, 1905;
Moscow, Russia
Died: Nov. 16, 1990

Haeff's contributions to vacuum tube technology included the traveling wave tube (1933), the inductive-output tube (1939), the resistive wall tube (1941), and at the end of WWII, the "memory tube", a cathode ray tube capable of temporarily storing data. However, Haeff's approach eventually lost out to the Williams-Kilburn tube [Dec 11] which was simpler to build, albeit slower.

Haeff's memory tubes were most notably used for data storage in MIT's Whirlwind [April 20], but the team spent a considerable amount of time trying to make them function reliably. Robert Everett joked afterwards, "We made them work although I aged a great deal in the process."

Tektronix engineer Robert H. Anderson later modified Haeff's design to create the 'simplified direct-viewing bistable storage tube'. This was used with considerable success in high-end monitors supporting text and graphics in the 1970's (e.g. the Tektronix 4014).

Neither Haeff's memory tube nor the Williams-Kilburn tube was the first utilized for data storage; that honor belongs to the Selectron invented by Jan A. Rajchman [Aug 10] in 1946.

Kenneth Mark Colby

Born: Jan. 12, 1920;
Waterbury, Connecticut
Died: April 20, 2001

Colby applied computing to the study of cognition, and is perhaps best known for the development of PARRY in 1972,

which mimicked a person with paranoid schizophrenia and could "converse" with others in that manner. It was sometimes described as "ELIZA [Jan 8] with attitude".

Of course, it was inevitable that PARRY and ELIZA would be brought together. Here's a sample of their conversation:

PARRY: In my opinion you have a one-track mind.

ELIZA: What makes you think I have a one-track mind?

PARRY: I used to go to the tracks every week.

ELIZA: What does that suggest to you?

PARRY: I avoid racetracks now because the races are fixed.

PARRY was the first program to pass the Turing Test [Oct 00], which generated heated discussion about the meaning of machine intelligence, and the utility of the Turing test.

James Nicholas Gray

Born: Jan. 12, 1944;
San Francisco, California

Gray contributed to several major database and transaction processing systems, including System R [Aug 19] and the Ingres project [Oct 11].

In System R, he focussed on the problems of concurrency control and crash recovery, and came up with the "transaction" idea, a unit of work, such as moving money from one bank account to another, that must leave the database in a consistent state whether or not it succeeds. Memorably, he called the system requirements for transaction processing, the ACID test.

His other work includes fault-tolerant systems, TerraServer – an online repository of public-domain aerial imagery and maps, leading the Worldwide Telescope at Microsoft Research, and early experiments with lifelogging [Oct 8].

It is sometimes claimed that Gray's 1985 paper, "Why do computers stop and What can be done about it?" introduced the term "Heisenbug" – a bug which when investigated promptly vanishes. The term is a pun on Werner Heisenberg's name, the physicist who proposed the observer effect of quantum mechanics, where the act of observing a system inevitably alters its state. However, Heisenbug appears to be in use at least as early as 1983. Multiple other 'physics' bug names have been coined since, including the bohrbug, schrödingerbug, and higgs-bugson.

On Jan. 28, 2007, during a short solo sailing trip, Gray and his 40-foot yacht, Tenacious, went missing. Gray is now legally assumed to have died at sea.

Jeffrey Preston

Bezos (BAY-zohss)

Born: Jan. 12, 1964;
Albuquerque, New Mexico

Bezos is the pugnacious, go-getting chairman and CEO of Amazon [July 16], with a long term interest in space travel.



Jeff Bezos (2004). Photo by JD Lasica. CC BY 2.0.

When he graduated from high school in 1982, he informed the *Miami Herald* that he planned to "build space hotels, amusement parks and colonies for two million or three million people". While studying at Princeton, he served as the President of its chapter of the "Students for the Exploration and Development of Space". In 2000, post-Amazon,

he founded "Blue Origin", a spaceflight startup, and is reported to be selling up to \$1 billion of Amazon stock each year to support its work.

In 2016, Bezos played a Starfleet officer in the movie "Star Trek Beyond". He's hard to spot due to his handsome visage being hidden by a wrinkly, prune-like grey mask, but he's the alien that says, "Speak normally". Of course, he's been a fan of the TV show [Sept 8] since childhood, and an Enterprise model is on display in a prominent position at the Blue Origin headquarters.

In 2012, Bezos was named "Businessperson of The Year" by *Fortune* magazine, and "World's Worst Boss" by the International Trade Union Confederation in May 2014.

He is currently the world's richest man, worth around \$190 billion. Bezos has said that he'll step down as Amazon CEO at the end of 2021 to spend more time on other projects, but will take on the role of "executive chairman".

The Bat Computer

Jan. 12, 1966

The Burroughs [Jan 28] B205 isn't particularly significant in the historic sweep of computer hardware although it was the first commercial machine to use an index register, high-speed drum memory, and floating point arithmetic back in 1954. One quirk has been its many names – essentially the same machine was marketed as the Datatron 205, CEC 30-201, CEC 30-203, and ElectroData 205.



The Burroughs B205 console.

The B205's real claim to fame is its central place in US movies and TV of the 1960's. It really does seem like every show includes a B205 console (and/or tape drive). Its profusion of flashing lights, shiny knobs, and toggle switches made it a star.

For many of us the quintessential B205 role was as the "Voice-Control Batmobile Relay-Circuit" in the Batman TV show (which began airing on this day). B205 also guest-starred in "Batman - The Movie" (1966), playing the "Navigational Aid Computer".

Back in the real world, Donald Knuth [Jan 10] wrote an ALGOL 58 [May 27] compiler for the B205 during the summer of 1960. To my mind, this makes it very likely that Batman utilized Knuth's compiler while writing his "Bat Crime-fighting" software.

Other B205 appearances include in "Sex Kittens Go To College" (1960), "Dr. Goldfoot and the Bikini Machine" (1965), in episodes of "Hogan's Heroes", "Lost in Space", "Get Smart", "The Time Tunnel", "Voyage to the Bottom of the Sea," and in the influential movie, "The Computer Wore Tennis Shoes" ([Dec 31] 1969)

Another movie/TV favorite of this period was the IBM AN/FSQ-7 [Nov 14].

Sinclair QL

Jan. 12, 1984

Sinclair Research [July 30] launched the Sinclair 16/32-bit QL (Quantum Leap) microcomputer, featuring a Motorola 68008, 128 KB of RAM, two tape drives, and QDOS, the first pre-emptive multitasking OS for a microcomputer.

It was also the first home computer to employ a 32-bit CPU, since today's launch beat Apple's release of the Mac by two weeks [Jan 24]. However, the QL was far from being ready, and machines only started appearing at the end of April.

One story claims that only a few dozen QLs shipped on the first day of sales, with each one delivered by taxi or personally by Sinclair staff driving hire cars. Some comedians suggested that QL stood for "Quite Late".

The QL was plagued by hardware problems, mostly due to the tape drives. These were eventually fixed, but the QL's reputation had been damaged, and the machine sold poorly.

Linus Torvalds [Dec 28] owned a QL in the 1980's, and became a programmer in part because there were so few other people in Finland developing code for it. He's also said that the pre-emptive multitasking in Linux was inspired by QDOS.

IBM's UNIX

Jan. 12, 1984

The "Personal Computer Interactive Executive" (PC/IX) was a single-user version of System III UNIX, and the first UNIX released by IBM for its PC XT [March 8] (although the software was actually developed by Interactive Systems Corp).

PC/IX had a noticeable speed advantage over MS-DOS [Aug 12] since it addressed the XT's hard drive directly rather than communicating via the BIOS. However, the distribution came on 19 floppy disks and was accompanied by a 1,800-page manual. But the real disadvantage was the cost – \$900, compared to \$50 for MS-DOS.

PC/IX wasn't the first port of UNIX to the XT. Venix/86 preceded it by about a year, and was based on the older Version 7 UNIX.

2600

Jan. 12, 1984

Eric Gordon Corley [Jan 11] released the first issue of "2600: The Hacker Quarterly", printed on three sheets of paper and mailed to several dozen people.

However, it went on to become one of the best known publications covering the US hacker scene; it's main competitor was PHRACK [Nov 17] magazine.

Corley wrote under the pen name "Emmanuel Goldstein," a reference to George Orwell's "1984" in which Goldstein is the leader of "The Brotherhood", "Big Brother"'s main opposition. In all likelihood, Goldstein is an invention by "Big Brother" to justify its attacks on civil liberties.

The magazine's "2600" moniker came from the phreaker [March 20] discovery in the 1960's that the transmission of a 2600 Hertz tone over a long-distance trunk phone line granted access to the powerful operator mode [May 17].

HAL 9000

Jan. 12, 1997

The HAL (Heuristically programmed ALgorithmic) 9000 became operational in Urbana, Illinois on this day, at least according to Arthur C. Clarke's [Dec 16] "2001: A Space Odyssey" novel. However, HAL 'woke up' on Jan. 12, 1992 in the movie [April 2], and early versions of the screenplay had used the year 1991.

Stanley Kubrick wanted HAL to be a 'child' when it was decommissioned at the end of the movie, thereby adding to the emotional impact. However, Clarke argued that such a vintage computer (nearly ten years old) would never be utilized for such an important mission.

Their contretemps resurfaced when film critic Roger Ebert held a birthday party for HAL in 1997 (incidentally, Ebert was also born in Urbana). Clarke and Kubrick were both invited to the event which included a screening of the movie. Clarke made an appearance via satellite link, but Kubrick declined, stating that Ebert had missed HAL's actual birthday in 1992.

HAL is a one-letter shift of the acronym IBM, and there's been some speculation that this was meant as some kind of insult to the company, but both Clarke and Kubrick have denied it. Indeed, Kubrick asked IBM for advice during the making of the film, and their logo can be seen on some of the props. However, IBM did become worried when they realized the film involved a homicidal computer, but calmed down after it was pointed out that HAL's equipment failure was unrelated to any IBM product.

When HAL is switched off, it sings "Daisy Bell" ("I'm half crazy, all for the love of you"). The choice of song was inspired by a demo that Clarke had seen of computer-synthesized voice and music at Bell Labs in 1962. John Larry Kelly, Jr. and Carol Lochbaum had developed a voice recorder synthesizer (aka a vocoder) on an IBM 704 [May 7], with musical accompaniment from Max Mathews [Nov 13].

HAL wasn't the first computer with that name; it was preceded by the real-life Hal-4096 [Sept 00] in 1966, developed by Hal Chamberlin as a student project.

Homer's E-mail

Jan. 12, 2003

"The Dad Who Knew Too Little" was the 8th episode of the 14th season of "The Simpsons". Homer realizes that he knows almost nothing about his daughter Lisa, and decides to hire a private detective to spy on her. The episode is notable for having Homer reveal his e-mail address,

chunkylover53@aol.com.

The episode's writer, Matt Selman, registered the address before the broadcast, thinking that "if anyone wanted to write an e-mail to Homer, it would be fun to answer back." After the episode aired, he logged in to find that the inbox had reached its maximum 999-messages limit. It stayed that way for some time, despite his attempts to answer the posts.

The address returned to the news in 2008, after the account was hacked.

For more Simpsons, see: [Feb 15], [Nov 8], [Nov 13], and [Nov 30].

Pirate Bay Sealand

Jan. 12, 2007

"The Pirate Bay" (TPB; [Aug 10]) revealed plans to buy the 550 square meter principality of Sealand, a former British naval platform situated in the North Sea. Nothing came of it, despite TPB raising \$25,000 in donations, but that was well short of the asking price of £65 million.



Sealand from the air. Photo by Ryan Lacke. CC BY 2.0.

Sealand was founded by Paddy Roy Bates on Sept. 2, 1967, who claimed the deserted WWII installation, then known as HM Fort Roughs, and declared himself Prince of Sealand.

The HavenCo Internet co-location service was set up on Sealand in Dec. 2000 by Prince Michael (son of Prince Paddy). It promoted itself as a data haven, and offered a 1Mbps link for \$1,800 per month. HavenCo ceased trading in 2008.

At one time, TPB also considered buying Ladonia (size: 1 square kilometer), located at the edge of the Scandinavian Peninsula.

For the first virtual sovereign micro-nation, see [Aug 14].
