May 31st

John George Kemeny

(Kemény János György)

Born: May 31, 1926;

Budapest, Hungary.
He became a US citizen in 1945.
Died: Dec. 26, 1992

Kemeny and Thomas E. Kurtz [Feb 22] developed the Dartmouth College of the Dartmouth Time-Sharing System (DTSS) and BASIC [May 1].

In 1962, Kurtz approached Kemeny, then chairman of the math department, with what Kemeny later humorously termed an "outrageous suggestion that every Dartmouth student should learn to use a computer." In fact, Kemeny was a firm believer in the use of computers for college education. For example, after Dartmouth acquired its first computer in 1959, a Royal McBee LGP-30 [Sept 00], it was Kemeny that argued that it should be available to all undergraduate students.

During WWII, he had worked on the Manhattan Project at Los Alamos, calculating numerical solutions to differential equations; his boss was Richard Feynman [May 2]. The crews in the "computing center" organized by John von Neumann [Dec 28] worked on desktop calculators in three eight-hour shifts, 24 hours a day. It typically took two or three weeks to produce a single result.

Kemeny would later joke that a year's worth of work by a Los Alamos number-crunching team of 20 people could be done in a single afternoon by a Dartmouth sophomore on the school's time-sharing system.

After the war, Kemeny returned to Princeton, and became Albert Einstein's research assistant at the Institute for Advanced Study (IAS), helping the great man with his math homework. His doctorate ("Type-Theory vs. Set-Theory.") was supervised by Alonzo Church [June 14].

In an April 1955 *Scientific American* article, "Man Viewed as a Machine," Kemeny summarized lectures von Neumann had given on the question "What could a machine do as well as, or better than, a man?"

In the late 1960's, Kemeny owned the vanity license plate "BASIC".

Jay Glenn Miner

Born: May 31, 1932;

Prescott, Arizona
Died: June 20, 1994

Miner is probably best known as the "father of the Amiga" [July 23], but one of his first successes in the late 1970's was the TIA (Television Interface Adaptor) [Oct 14] – a single chip that managed the display hardware for the Atari 2600 [Oct 14], replacing an entire breadboard of components.

His follow-up multimedia chip sets, the ANTIC and CTIA/GTIA, were employed by the Atari 8-bit family (the Atari 400 and 800 models [Nov 00]) and the Atari 5200.

In the early 1980's, Miner, along with many other Atari staff, became very disillusioned with the company's management. Larry Kaplan, and a half-dozen of his team, left to start Activision on [April 25] 1980. Miner and David Morse [April 15] set up "Hi Toro" in Sept. 1982, which became Amiga Corp.

Miner began the development of a new Motorola 68000-based [Sept 26] games console, codenamed Lorraine (after Morse's wife), which ultimately became the Amiga 1000 [July 23]. Miner recalled the project: "my goal was to design a low cost computer that could do good flying aeroplane simulations."

While Miner worked at Atari, his dog "Mitchy" (a cockapoo) had her own ID badge, and Mitchy's paw print is visible on the inside of the Amiga 1000, alongside the signatures of the other engineers.

Mitchy's paw print. Photo by Steve Heal. CC BY 2.5.

During this time, Miner also designed a microprocessor-based cardiac pacemaker; the chip was called the Lazarus.

ENIAC Begins

May 31, 1943

Prev: [April 8] Next: [May 00]

J. Presper Eckert [April 9] and John Mauchly [Aug 30] began work on the classified "Project PX" at the University of Pennsylvania's Moore School of Electrical Engineering in Philadelphia.

Eckert and Mauchly were the lead designers, under the supervision of John Brainerd (the head of the school) [Aug 7], with Herman Goldstine [Sept 13] as the army's liaison officer. The three other principal designers were Arthur W. Burks [Oct 13], Thomas Kite Sharpless, and Robert F. Shaw.

The formal contract between the army and the school was signed on June 5, and at around this time the machine was named the Electronic Numerical Integrator and Computer (ENIAC [Feb 15]). It would become the first ever electronic and general purpose computer.

Fallout Shelter Tested

May 31, 1982

InfoWorld magazine ran a review of the Apple II [June 5] application, “Fallout Shelter Design,” the brainchild of Bob Karcher; the reviewers called it the “VisiCalc [Oct 19] of the Atomic Age”.

Karcher's program computed a person's exposure to radiation based on the size of a hypothetical nuclear blast, and their distance from it. It could also recommend how thick to build the walls of that person's fallout shelter.

At the time, Karcher worked as a designer of nuclear protection systems for Rockwell International. In the *InfoWorld* review, he admitted that he hadn’t built his own fallout shelter yet, but was giving it “serious consideration.”

Steve in Siberia

May 31, 1985

Next: [Sept 16]

Macintosh [Jan 24] sales had been dismal during Christmas 1984, causing Apple to publish their first quarterly loss, and fire a fifth of their staff.

During a two-day board meeting on April 10 and 11, Apple’s CEO John Sculley [April 6] demanded that Steve Jobs [Feb 24] be relieved of his position as vice president and general manager of the Mac division. In response, Jobs tried to have Sculley fired.

Sculley told the board: “I’m asking Steve to step down and you can back me on it and then I take responsibility for running the company, or we can do nothing and you’re going to find yourselves a new CEO.”

On this day, the board announced a corporate restructuring plan that eliminated both its Apple II [June 5] and Mac divisions.

Jobs was removed from all of his duties as a division manager, but given the new job description of “global thinker”.

He was left with few responsibilities, and his new office, located in a small building (Bandley 6) that was almost empty, was dubbed “Siberia” by Apple insiders.

All Your Base Are Belong To Us

May 31, 1991

Toaplan Co. released an English language version of “Zero Wing”, a scrolling shooter for the Sega Genesis [Oct 29]. It was based on a popular Japanese arcade game from 1989, with an added introductory scene to expand the plot.

The text was poorly translated due to the rush to get the game to market. For example, a villain named Cats remarks scathingly:

“How are you gentlemen. All your base are belong to us!! You are on the way to destruction. You have no chance to survive make your time.”

Screenshot from the Sega game "Zero Wing".

On Feb. 15, 2001, a Flash animation [Jan 6] of the scene was posted to several Internet forums. The video used the original graphics, but was dubbed with a monotone, machine-generated speech reading of each phrase.

After 30 seconds or so, the original visuals fade to black, a low-resolution image of Earth appears, and the robo-voice screams "ALL YOUR BASE, BASE, B-BASE, ALL YOUR BASE, ARE BELONG TO US," and the game's background music becomes aggressively techno.

Masahiro Yuge, a game developer who worked for Toaplan at the time, believes the "Zero Wing" translation was carried out by the person in charge of exports at Toaplan whose English was rather poor.

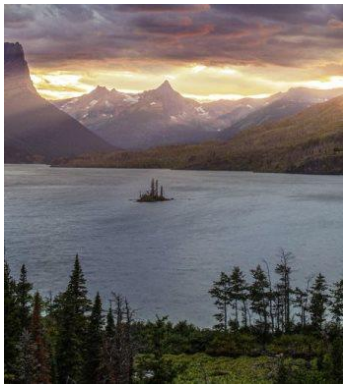
On April Fool’s Day 2003 [April 1], the meme entered the mainstream after local police in Sturgis, Michigan saw signs bearing the words billposted around town, and naturally decided their peaceful community was under attack. Police chief Eugene Alli mused that the signs could be “a borderline terrorist threat depending on what someone interprets it to mean.”

For more Internet memes [Nov 15], see [April 21], [Aug 00], [Jan 5], [July 27].

Android Wallpaper Bug

May 31, 2020

It was discovered that if the image shown below was set as the wallpaper on some Android phones [Nov 5] that it would trigger a *bootloop*, requiring the user to do a factory reset via the recovery menu. A bootloop is when a device tries to power on, but fails and restarts. On the next iteration it also fails and restarts, and so on.



Part of the Bootlooping Picture.

The affected phones were mainly Samsung devices and Google Pixels phones, which use the default Android color engine.

It supports sRGB which specifies that the luminance of each pixel is a sum of red, blue and green luminance values with a maximum of 255.

The problem photo employs the Google Skia color profile that isn't supported natively in Android 10. The conversion produces red = 54.213, green = 182.376, blue = 18.411, which are rounded up to red = 55, green = 183, blue = 19. The sum is 257, more than the 255 limit.