AIEE Begins
May 13, 1884

Less than five years after the development of the first incandescent light bulb, the American Institute of Electrical Engineers (AIEE) was formed. Members later included Nikola Tesla [July 10], Alexander Graham Bell [March 7], and Thomas Edison [Feb 11].

The AIEE's early areas of interest were electric power, lighting, and wired communications. However, radio and wireless communications became the focus of a rival organization, the Institute of Radio Engineers (IRE), which was established in 1912. That rivalry ended on [Jan 1], 1963 when the two organizations merged to form the Institute of Electrical and Electronics Engineers (IEEE).

The AIEE's first logo depicted Benjamin Franklin's kite, representing the discovery that lightning carried electricity. It also featured a winding of gold wire with its midpoints crossed by a galvanometer's indicator, invoking the electrical engineer's Wheatstone bridge. Ohm's law was written underneath.

The AIEE Badge. (c) IEEE. Photo by Sanjog.

Breakout Released
May 13, 1976

Atari's [June 27] Nolan Bushnell [Feb 5] wanted to turn Pong [Nov 29] into a single player game, where the user repeatedly hit a wall of bricks with his balls. He was certain such a pastime would prove popular.

Bushnell and Steve Bristow [Nov 5] produced a conceptual design for the new Breakout game, and assigned a young (pre-Apple) Steve Jobs [Feb 24] to build a prototype. Jobs was to be paid just $750, but with the possibility of a bonus if he could reduce the number of TTL chips below 50.

Jobs eagerly promised to complete the work in four days, a harsh deadline that was only met after Steve Wozniak [Aug 11] slaved for four nights straight (his day job was at Hewlett-Packard).

Wozniak's design used just 42 chips, although the final, working breadboard utilized 44. Wozniak recalled, "We were so tired we couldn't cut it down." Jobs' role in the process was as breadboarder and tester.

The reduction in chips meant a bonus of $5,000, which Jobs kept secret from Wozniak, who received $350.

In any event, Atari ended up designing their own production version of the board which utilized a whopping 100 chips. Wozniak's design was deemed too compact and complicated to be produced economically with Atari's current manufacturing methods.

Al Alcorn [Jan 1] was the Breakout game's project manager, and development was carried out by Cyan Engineering.

The arcade cabinet used a black and white monitor, but had colored cellophane strips stuck on it so that the layers of bricks appeared to be colored.

TrueType
May 13, 1991

Apple's TrueType font format was designed as a means of avoiding per-font royalty payments to Adobe [Oct 6], and as a solution to some of the technical limitations of Adobe's Type 1 format.

The initial fonts – Times Roman, Helvetica, Courier – replicated the Adobe PostScript fonts on the Apple LaserWriter [March 1]. All of them could scale to any size on the screen and printer, making Mac System 7 [next entry] the first Apple OS to not rely on bitmap fonts.

During its development, TrueType had the codename "Bass" because these were scalable, and you can scale a fish.

Apple licensed TrueType to Microsoft for free, which soon added them to Windows 3.1 [April 6], where they were a massive success. Ironically TrueType never became as popular on the Mac.

When the Microsoft license was announced, Adobe's John Warnock [Oct 6] gave an impassioned speech in which he claimed Apple and Microsoft were selling snake oil, and that his company's Type 1 format was open for anyone to use. A few days later, Apple sold all of its Adobe shares for $389 million.

By the later 2000's, both Adobe's Type 1 and Apple's TrueType had been replaced by OpenType, a new standard developed by Adobe and Microsoft. OpenType fonts contain more glyphs, support more languages, and worked across the Mac OS and Windows without conversion.

System 7
May 13, 1991

System 7, codenamed "Big Bang", was a major upgrade to the Mac's OS. New features included virtual memory, personal file sharing, QuickTime, QuickDraw 3D, and an improved

user interface [previous entry]. It also featured Sosumi, an alert sound composed by Jim Reekes. The name is derived from the phrase "so, sue me!", referring to the long running court battle with Apple Corps [Oct 8].

The upgrade was risky because it would be some time before the average Mac shipped with enough RAM for the OS to run comfortably. System 7 was also the first release that could no longer be viably run on a floppy-drive only machine.

Planning for System 7 and beyond had begun in March 1988 at an offsite meeting, where ideas were tabled on coloured index cards. Features that seemed simple enough to implement in the short term (like adding color to the user interface) were written on blue cards, longer-term goals like true multitasking on pink cards, and "far out" ideas like an object-oriented file system on red cards.

Subsequent development of the blue and pink card ideas proceeded in parallel. The "blue" team (which came to call themselves the "Blue Meanies" after characters in The Beatles [Oct 8] cartoon "Yellow Submarine" (1968)) were responsible for System 7, while the "pink" team worked on the Pink OS [April 12]. After Apple joined the AIM alliance [Oct 2] with IBM and Motorola, Pink 'evolved' into the ill-fated Taligent project [Oct 2].

Taligent was followed by the equally ill-fated Copland [May 8] which meant that when OS 8 arrived on [July 26] 1997, it was little more than a renamed System 7.7. And so, System 7 remained the foundation for the Mac's OS for ten years, until the release of Mac OS X on [March 24] 2001.

Apple's Bad Trip
May 13, 1993

Apple [Feb 2] hired Ken Kesey, acclaimed author of "One Flew Over the Cuckoo's Nest", former

leader of the Merry Pranksters [Dec 14], and LSD pioneer, to be part of the entertainment for a 1960's "Groove Fest" party, one of several the company held as part of its developers conference.

Kesey arrived at the party in a replica of "FURTHUR", the bus the Pranksters drove around the country while experimenting with LSD in the mid-60's, a trip immortalized in Tom Wolfe's bestselling "The Electric Kool-Aid Acid Test."

Kesey entertained attendees by "telling his warrior stories", a friend recounted. After about 20 minutes, Kesey suggested in an off-the-cuff remark that the federal government should have dealt with the recent stand-off in Waco, Texas, by spraying the compound with LSD instead of bullets. That's when one of the show's producers rushed onstage and told Kesey he was through because of the drug reference.

Kesey later noted: "The whole thing was ill-programmed to start with. They didn't want live people. It came as a surprise to them."

EyeToy Debuts
May 13 2003

The EyeToy was a color digital USB camera for the PlayStation 2 [March 4] that utilized computer vision techniques to process its images, therby letting players interact with games using gestures and colors; sound input was also possible through a built-in microphone. After a public demo at E3 [May 11] on this day, the product went on sale in October.

The EyeToy was conceived by Richard Marks in 1999 after seeing a demo of the PlayStation 2. His previous research at Stanford had employed video interfaces to control robotics systems. He called his new device the iToy (short for "interactive toy").

EyeToy sales were good – more than 10.5 million units had been

sold worldwide by Nov. 2008, but there was a lingering perception that this kind of interface wasn't as robust or responsive as a standard game controller.

The Playstation 2 EyeToy. Photo by Dave Pape.

The EyeToy evolved with later versions of the PlayStation, becoming the PlayStation Eye ([Nov 11] 2006), and then the PlayStation Camera ([Nov 15] 2013). The device became smaller and incorporated a second camera, giving it the ability to calculate depth, and became a standard part of the PlayStation VR system [Oct 13].

Color E-paper Display
May 13, 2007

LG.Philips LCD announced the world's first 14.1-inch flexible color E-paper display. The device, the size of an A4 sheet of paper, was capable of displaying 4,096 colors that could be seen clearly across a wide range of angles. It relied on a substrate that arranged Thin-Film Transistors (TFT) on metal foil.

This was the second major breakthrough in E-paper for the company, which had introduced the world's first 14.1-inch black and white flexible E-paper display a year before.