June 6th

Karl Ferdinand Braun

Born: June 6, 1850;

Fulda, Germany
Died: April 20, 1918

Braun made significant contributions to radio and television technology, and shared the 1909 Nobel Prize for physics with Guglielmo Marconi [Dec 11].

Braun experimented with ways to improve the power and range of radio transmissions. At the time, antenna were connected directly to their power supply, resulting in a maximum range of about 10 miles. Braun's idea was to remove the antenna from the power circuit and use magnetic coupling to boost the output.

In 1897 he built the first cathode-ray tube (CRT) and cathode ray tube oscilloscope. Indeed, the CRT is still called the "Braun tube" (Braunsche Röhre) in German-speaking countries, and in Japan.

Robert B. McGhee

Born: June 6, 1929;

Detroit, Michigan

McGhee's "Phony Pony", the first computer-controlled four-legged robot, took its first steps at the University of Southern California in the late 1960's. McGhee later explained the name: "When we started working on walkers, I drew some inspiration from my daughter's horses."

McGhee also created the first autonomous six-legged robot, the Hexapod. It could walk at various speeds, turn, and move sideways. McGhee explained the increase in appendages thus: "Unfortunately, four-legged machines have to solve balancing problems that are far more difficult than comparable problems in hexapods."

McGhee and his colleagues' Adaptive Suspension Vehicle (ASV) from 1985 was the first hexapod to tackle the great outdoors. It was about 5 meters long, weighed around 2,700 kg, and was capable of carrying a person over rough terrain. The legs were driven hydraulically in order to deal with the weight.

Tim O'Reilly

Born: June 6, 1954,

Cork, Ireland

O'Reilly was the founder of O'Reilly Media (formerly O'Reilly & Associates), and an active supporter of the free and open source movements [Feb 3]. He started publishing computer manuals in 1983, setting up business in a converted barn in Newton, Massachusetts.

In 1992, O'Reilly Media published one of the first popular books about the Internet, Ed Krol's "Whole Internet User's Guide and Catalog". It was a massive success, with around 250,000 copies sold *each year* for several years. As an educational helping hand to government, O'Reilly also sent a free copy to every member of Congress.

A Philippine Tarsier. Photo by Cgaa. CC BY-SA 3.0.

The company's unofficial mascot is the tarsier, possessing huge eyes, long bony digits, and a head that can swivel 180 degrees. Graphic designer Edie Freedman first used one on the cover of "Learning the vi Editor" because O'Reilly thought the tarsier "looked like somebody who had been a text editor for too long."

O'Reilly Media created the first web portal, the Global Network Navigator ("GNN") on [Aug 19] 1993, which it sold to AOL [Oct 2] in 1995 for $11 million. A tidy sum, but O'Reilly later remarked that, "If we'd held on until the peak, that stock would have been worth a billion dollars".

O'Reilly is a follower of George Simon, the author of General Semantics which seeks to regulate mental habits and behaviors for greater sanity. Simon was also a scoutmaster, and his Explorer troop in the mid-1960's included O'Reilly's older brother Sean, and eventually Tim himself.

First AppleFest

June 6-7, 1981

AppleFest '81 attracted around 9,000 attendees and over 80 exhibitors. It was sponsored by Apple/Boston, a users' group affiliated with the Boston Computer Society.

The big story from Apple was the continuing absence of the Apple III [May 19]. The only IIIs were in the Apple booth, and only running demo programs.

At an Applefest seminar, Steve Jobs [Feb 24] noticably winced when the subject of the Apple III came up during questions.

Tetris in the USSR

June 6, 1984

Tetris, the addictive tile puzzle game released on this day, was designed and programmed by Alexey Leonidovich Pajitnov, while working at the Dorodnicyn Computing Centre of the Academy of Science in Moscow.

During the planning stages, Pajitnov had considered basing the game around pentominoes [May 30], but felt that twelve different shapes was too complex. He switched to tetrominoes, which only have

seven variants, nicknamed I, J, L, O, S, T, and Z, after their shapes.

He derived the game's name from the Greek numerical prefix tetra- (all the pieces are made from five blocks) and tennis, Pajitnov's favorite sport.

Tetris first ran on a Soviet-built Elektronika 60, which only had a text-based display. This meant that Pajitnov had to draw the tetrominoes using brackets. However, co-workers Dmitry Pavlovsky and Vadim Gerasimov soon ported the game to the IBM PC, and it spread quickly across the USSR.

Tetris was released by Spectrum Holobyte in the US for the Commodore 64 [Jan 7] and IBM PC on Jan. 29, 1988. However, the status of their licensing agreement was somewhat unclear, and matters got worse when other companies became interested in porting the game. After a long legal battle, the winner was Nintendo, who subsequently used Tetris to drive sales of its Game Boy [April 21].

Sadly, Pajitnov was unable to profit from his work on Tetris for many years because, as an employee of the Soviet government, the state owned the rights to the game.

The question "Could a Perfect Player play Tetris indefinitely?" was considered in John Brzustowski's thesis in 1992. Disappointingly, it seems that no matter the combatant's ability, the game area will inevitably fill up. It has to do with the shapes of the S and Z tetriminos.

Usenix Playing Cards

June 6-10, 1994

USENIX [May 15] created a limited-edition deck of playing cards to honor contributors to UNIX on the occasion of its 25th birthday [Oct 15], with each card featuring a glamor shot of a UNIX Guru, and their name. The cards were handed out to select (and certified) UNIX administrators at the 1994 USENIX conference.

Evi Nemeth coordinated the deck's production, helped by a committee consisting of J.R. Oldroyd (who originated the wonderful concept), Dennis Ritchie [Sept 9], Kirk McKusick, Keith Bostic, and Margo Seltzer.

Kenneth Thompson [Feb 4]. Created by The USENIX Association (1994).

The cards can be viewed as a magnificient group at `http://www.ugu.com/sui/ugu/showclassic?I=info.usenix-cards`, and individuals at an excitingly higher resolution can be perused at `http://www.ugu.com/sui/ugu/show?I=info.unix-contrib`

The idea is so good, it's been used at least two other times in computing circles. There's a deck representing "Notable Women in Computer Science" at `http://www.notabletechnicalwomen.org/about/the-honorees-notable-women-in-computer-science/` (which contains 54 women, two of who are designated as "Jokers"). There's also an Apple-branded deck, dating from System 7 ([May 13] 1991) days.

Perhaps the best known use of the concept was during the 2003 invasion of Iraq. The US military published an illustrated deck to help troops identify the most-wanted members of President Saddam Hussein's government.

An intriguing question is which UNIX hacker corresponds to Saddam?

Vatican Library Online

June 6, 1995

The Los Angeles Times reported that Father Leonard Boyle, the director of the Apostolic Vatican Library, was working to making the library accessible via the Web through its Digita Vaticana Onlus project (`http://www.digitavaticana.org/?lang=en`).

As of July. 2021, 21,000 of the 80,000 manuscripts in the collection had been digitized.

For more Vatican stories, see [April 4; Oct 17; Nov 21].

Other digital libraries of note include the Library of Congress' American Memory [Oct 13], the Internet Archive [May 12], Project Gutenberg [Dec 1], Google Books [Oct 6], the World Digital Library [April 21], and WikiSource [June 20].

Mac Gets Intel

June 6, 2005

At the keynote address at Apple's Worldwide Developers Conference, Steve Jobs [Feb 24] announced that the Macintosh would be moving from PowerPC [Oct 2] chips to Intel processors. He even demonstrated Mac OS X [March 24] running on a machine with an Intel Pentium 4 processor [Feb 26].

Apple's primary motivation was their disappointment with IBM's sluggish development of the PowerPC [March 14]. Also, the change enabled a better level of compatibility with MS Windows.

Jobs revealed that Apple had been secretly preparing for a transition to Intel for years. This preparation time meant that the first generation Intel-based Macs were released in Jan. 2006.

One minor incompatibility with MS Windows PCs is that no Apple computer has ever sported an "Intel Inside" sticker [July 00; Oct 20].