Jan. 6th

First Public Telegraph Demo

Jan. 6, 1838

Samuel Morse's telegraph system [Oct 19] was publicly demonstrated for the first time at the Speedwell Iron Works in Morristown, New Jersey. The message "A patient waiter is no loser" was transmitted over two miles of wiring .

During the next few months Morse and Alfred Vail demonstrated the device before many audiences – at Philadelphia's Franklin Institute, for members of Congress, and President Martin Van Buren and his cabinet. These demos proved crucial to Morse obtaining Congressional funding of $30,000 to build the first telegraph line from Washington to Baltimore, which opened in [May 24] 1844.

Vail's contributions to the telegraph have tended to be forgotten, even though he was responsible for several innovations, particularly the sending key and improved recording. He was also in charge of building and managing several of the early commercial telegraph lines. More controversially, some historians claim that it was Vail who invented Morse code.

Vail left the industry in 1848: "I have made up my mind to leave the Telegraph to take care of itself, since it cannot take care of me. I shall, in a few months, leave Washington for New Jersey, ... and bid adieu to the subject of the Telegraph for some more profitable business."

Peter James Denning

Born: Jan. 6, 1942; NYC

Denning devised the working-set model for avoiding memory thrashing in OSes, a problem he first encountered during the development of Multics [Nov 30].

Peter Denning. Photo by Louis Fabian Bachrach.

Denning also worked on queuing systems, CSNET [May 00], and the ACM [Sept 15] digital library.

In the early 1970's he collaborated with Ed Coffman, Jr. on writing the classic textbook, "Operating Systems Theory", which stayed in print until 1995. While he was the editor of the *Communications of the ACM* journal, he was responsible for introducing the beloved April Fool section. From 1985-1993 he wrote nearly fifty columns about computing for *American Scientist* magazine.

He is married to another noted computer scientist, Dorothy E Denning [Aug 12].

A quote: "After many years of trying to make computers think like brains, AI researchers got brains that think they are computers."

Rowan Sebastian Atkinson

Born: Jan. 6, 1955;

Consett, County Durham, UK

In the 1970's, before Atkinson became "one of the fifty funniest actors in British comedy" (according to *The Observer* newspaper), he received a degree in Electrical Engineering from Newcastle University. He followed this with a Master's degree at Queen's College, Oxford, with a thesis entitled "The Application of Self-tuning Control" (1978).

During this time, he was also a member of the Oxford University Dramatic Society (OUDS), the Oxford Revue, and the Experimental Theatre Club (ETC). As part of the scriptwriting team of the ETCeteras revue, Atkinson met Richard Curtis who later co-wrote "Mr. Bean" and Blackadder with him.

Susan Beth Horwitz

Born: Jan. 6, 1955;

Berkeley, California
Died: June 11, 2014

Horwitz's research on programming languages included the topics of program slicing and dataflow analysis.

Horwitz was also a gifted teacher, known for her imaginative use of props, including nose glasses to explain recursion, and suction-cup-tipped arrows and string to illustrate C pointers.

She occassionally composed songs to help clarify her lecture material, often based on the tunes of Christmas carols. She also served on the board of the "Bach Dancing & Dynamite Society", a chamber music ensemble.

Satya Narayana Nadella

Born: Jan. 6, 1967;

Hyderabad, Telangana, India

Nadella succeeded Steve Ballmer [March 24] as Microsoft CEO on Feb. 4, 2014. Before this accession, he had been the Executive Vice President of Microsoft's cloud and enterprise group, having joined the company in 1992, after working at Sun Microsystems [Feb 24].

Nadella's leadership has marked a move away from proprietary phone hardware and OSes, towards subscription products, and an emphasis on cloud computing services, such as Azure [Feb 1] and Office 365. The company even started the slow process of rebranding itself as an (unlikely) champion of open-source [June 1].

In 2015, Microsoft suffered a $7.6 billion write-down on its 2014 Nokia [April 25] deal (which had been a highlight of Ballmer's reign), and bid farewell to Windows Phone [Oct 11] in 2017.

Nadella has a keen interest in cricket, playing on his school team and dreaming of being a professional player as a child. He has likened test cricket to a Russian novel, because of the numerous sub-plots (and not because it's long and boring).

In Oct. 2014, Nadella found himself on a somewhat sticky wicket when he noted that women shouldn't ask for a raise, but rather trust the system to reward them. Amazingly, this opinion was given while he was attending a "Women in Computing" conference. He quickly apologized.

GPS Week Rollovers

Jan. 6, 1980

This day marked the beginning of the GPS [Feb 22] epoch – week 0 of Coordinated Universal Time (UTC).

The GPS date field for the week value is 10-bits wide, which means that it overflows and resets to Week 0 every 1,024 weeks, or 19.6 years.

So far there's been two week rollovers. The first, at midnight on Aug. 21, 1999, caused a few older GPS receivers to show an incorrect date. The second on April 6, 2019 caused more disruption, mainly due to unpatched software. Problems were reported by the NYC Wireless Network, the Australian Bureau of Meteorology, and the National Oceanic and Atmospheric Administration.

GPS modernization plans include a move to 13-bits for the week value, which would increase the rollover interval to a more manageable 150 years.

For links to other date/time related problems, see [Jan 1].

Flash Makes a Splash

Jan. 6, 1997

FutureWave Software was founded by Charlie Jackson, Jonathan Gay, Daniel Escobar, and Michelle Welsh in Jan. 1993. The company's first product was SmartSketch, a drawing program which was upgraded in 1995 to offer vector-based frame-by-frame animation features, and acquired a new name at the same time: "FutureSplash Animator".

FutureSplash became a popular tool; Microsoft used it to create animated content for MSN [Aug 24], and Fox TV utilized it for "The Simpsons" ([Jan 12], [Feb 15], [Nov 8], [Nov 13] and [Nov 30]). This reflects Flash's legacy – persuading creative people to get into interactive media.

On this day, FutureWave was acquired by Macromedia, who rechristened its flagship product Flash. In May, just a few months later, they published Macromedia Flash 2—with audio synchronization, photo imports, and autotracing (to convert bitmap images to vector format). Soon after, David Hillman Curtis applied a radical makeover to the company's website using the software, and the rest of the Web took note.

By the early 2000's, Flash was ubiquitous, not only as a way to write interactive Web pages and games, but to playback music and video. Adobe recognized this, and in 2005, a decade after turning down a deal to buy Flash, they acquired the technology as part of a $3.6 billion buyout of Macromedia.

But, Flash never made the transition from a de-facto standard to an actual one. Gradually, HTML [Oct 28], CSS, and JavaScript got more powerful. Also, the iPhone [June 29] and Android [Nov 5] arrived, but Flash had been designed for mouse input, not multi-touch. Flash's slow march to obsolesce began [June 25].

Flash was famously hated by Steve Jobs [Feb 24], who called it a doomed technology. Jobs' very public attack, in an open letter called "Thoughts on Flash" published on April 29, 2010, prompted a bitter battle with Adobe's CEO over the precise meaning of "open" and "closed" software.

The 1998 iPhone

Jan. 6 ??, 1998

The first iPhone, released by InfoGear Technology Corp, predates Apple's smartphone by almost nine years. It featured a sliding keyboard and LCD touchscreen, and ran a Web browser and email client.

The InfoGear iPhone. Photo by Bob Ackerman. CC BY-SA 3.0

The device won an Innovations '98 award at CES [June 24], and approximately 100,000 went on to be sold during its lifetime.

In March 2000, Cisco purchased InfoGear for $300 million, which allowed the company to rebrand its own VoIP-based phones with the iPhone name at the end of 2006 , coincidentally just before Apple released its iPhone [Jan 9].

After sundry negotiations and lawsuit filings, Apple and Cisco settled their dispute on Feb. 20, 2007. Both companies could use the “iPhone” name in exchange for “exploring interoperability” between Apple’s products and Cisco’s services.

Although the InfoGear device was the first phone to be called an “iPhone”, there was earlier “iPhone” software [Feb 10]. Also, Apple’s iPhone wasn’t the company's first attempt at selling a phone [Nov 26].

HGST

Jan. 6, 2003

HGST (Hitachi Global Storage Technologies) was founded after Hitachi acquired IBM's disk drive business [Dec 8].

In 2007 HGST announced the first 1 TB hard disk drive: the Hitachi Deskstar 7K1000, which held five 3.5 inches 200 GB platters. In Nov. 2013, HGST released a 6 TB capacity drive filled with helium. and a 10 TB helium drive followed in Sept. 2014.

Hard drives typically contain air, but helium is 1/7th as dense, and so reduces the drag and turbulence on the platters as they spin. This means less energy is required to rotate them, and also allows more platters to be packed into the same space.
