Feb. 16th

John Thomas Gilmore, Jr.

Born: Feb. 16, 1929;

Dorchester, Massachusetts
Died: Jan. 17, 2015

Gilmore played an important role in the programming of early computers at MIT, including the Whirlwind [April 20], TX-0 [Nov 20], and TX-2 [Feb 26]. In Oct. 1959, he and Charles Adams [Feb 6], co-founded the first software consulting firm, Charles W. Adams Associates, and Adams and Gilmore also created the first interactive computer game, involving a ball bouncing around the Whirlwind's screen.

Gilmore wrote the first symbolic assembler in 1951, which allowed programs to be written as a series of short, readable commands rather than as numbers or punch codes. Nathan Rochester's [Jan 14] better-known assembler debuted in 1952.

In the mid 1950's, his utility programs for the TX-0 included FIND, which could search for keywords in other programs. His "Scope Writer" utilized a light pen to mark dots on the screen, and its successor on the TX-2, "Lincoln Writer", could draw mathematical and Greek symbols. It became a popular tool on the PDP-1 and SAGE machines [June 26].

Michael Anthony Jackson (not the singer)

Born: Feb. 16, 1936;

Birmingham, UK

"Jackson Structured Programming" (JSP) was a popular methodology for designing programs in the late 1970's. It focused on a problem's input and output, designing a program that processed that data using a hierarchy of sequential, optional, and iterated elements. The original aim was to make COBOL batch file processing easier to implement.

JSP was joined by "Jackson System Development" (JSD; 1982) for entire systems, and in the 1990's by the "Problem Frames Approach" which extended his methods beyond information systems.

Jackson's two rules of program optimization: 1. Don't do it. 2. (For experts only) Don't do it yet.

CBBS

Feb. 16, 1978

CBBS was the first public dialup bulletin board system, created by Ward Christensen and Randy Suess because of Chicago's notoriously bad weather. In particular, due to the "Great Blizzard of 1978" which lasted from Jan. 24 to 29.

Christensen and Suess were members of CACHE, the Chicago Area Computer Hobbyists' Exchange, and Christensen had recently created a file transfer protocol called MODEM.

Snowed in, Christensen and Suess talked over the phone about building a computerized answering machine and message center for CACHE members. Notably, it would allow them to communicate without having to risk hyperthermia by going to actual meetings.

Christensen worked on the software (amounting to about 20,000 lines of CP/M [June 22] assembly) and Suess built the hardware (around an Intel 8080 [April 18] and a 300-baud Hayes [Jan 30] modem). The system was up and running within two weeks, operational on this day.

For more bulletin board systems, see [May 11], [Nov 28], [Dec 10].

IBM 5155

Feb. 16, 1984

The IBM 5155 Portable PC was IBM's response to the Compaq Portable [Nov 4], which had been released a year earlier, and had sold well despite "portable" being a somewhat misleading label for a suitcase-sized device.

The 5155 transplanted a PC/XT motherboard [March 8], into a Compaq-style luggable case, along with a built-in 9" amber monitor and two floppy drives. The combo weighed 30 pounds (13.6 kg), and didn't include a hard disk or batteries.

The IBM 5155; the disk drive on the right was installed later. Photo by Hubert Berberich. CC BY-SA 3.0.

As a Compaq-beater, the 5155 was disappointing, essentially offering the same hardware but at a higher price. Also, the Compaq was advertised as being 100% IBM compatible, and weighed slightly less. The 5155 was superceded by the IBM 5140 Convertible [April 3] two years later.

The 5155 wasn't IBM's first venture into portable computing; that was the 5100, released in [Sept 9] 1975.

GSM Spec.

Feb. 16-20, 1987

The first GSM (Global System for Mobile Communications) technical specification was agreed upon on this day at the European Telecommunications Standards Institute (ETSI). It

focused on supporting a digital 2G network optimized for voice telephony, although it later shifted towards data communications (triggered by the rise of texting).

On July 1, 1991, the Finnish Prime Minister, Harri Holkeri, made the world's first GSM call over a privately operated network; he spoke to Vice Mayor Kaarina Suonio in Tampere, southern Finland.

By 2014, GSM was the de facto global standard for mobile communications - with over a 90% market share, and operating in over 200 countries. But more changes were on the way.

The first 3G networks were introduced in Japan in 1998, increasing data transmission speeds up to a maximum of around 2 Mbps. This reflected the need for smartphones to be able to transfer larger amounts of data (e.g. videos of cats) in reasonable amounts of time.

4G's introduction in Norway in 2009 increased speeds to between 100 Mbps and 1 Gbps, so making the live-streaming of cat activities a possibility.

The US Federal Communications Commission (FCC) approved the spectrum for 5G on July 14, 2016. 5G incorporates features for supporting the growing importance of the Internet of Things (IoT [Sept 21]). This will make it feasible for your cat to wear a camera 24/7.

Cyberdog Released

Feb. 16, 1996

Cyberdog was Apple's OpenDoc-based software suite, including an email and news reader, a web browser, address book, and drag-and-drop FTP [April 16]. Its unique selling point was that OpenDoc components could be reused and embedded in other documents. For instance, a Cyberdog web page could be embedded in a slide presentation.

The reality was that OpenDoc components were invariably large and slow. Also, the idea of compound documents only seemed to be useful in a few specific cases, such as documents with graphics, and spreadsheets with charts.

Apple was on the ropes financially at the time, and needed to cut back on expenditure. Unsurprisingly, OpenDoc was scrapped, with Steve Jobs [Feb 24] explaining that they "put a bullet through (Cyberdog's) head".

Cyberdog derived its name from a cartoon in *The New Yorker* magazine captioned "On the Internet, nobody knows you're a dog" [July 5]. The Cyberdog icon was Susan Kare's [Feb 5] dogcow [Oct 15], standing on a globe.

GuitarFreaks Released

Feb. 16, 1999

GuitarFreaks was an arcade game produced by Konami, where the two controllers were in the shape of electric guitars. The players competed by being graded on their note-by-note accuracy when belting out a given song. The game included a dozen tracks, predominantly rock and roll, and J-pop.

Each guitar 'neck' housed three colored buttons, and a pick lever on the face of the guitar was used to simulate picking and strumming. A metal knob near the pick was used to add effects, such as a chorus or delay.

This game ran on BEMANI System 573 hardware, the same as used by Konami's "Dance Dance Revolution" [Nov 18] BEMANI began as the brand name for Konami's lineup of Rhythm Games, standing for beatmania. In fact, the first BEMANI game was "Beatmania" (1997), a "DJ simulator" .

With the next release of GuitarFreaks (called the 2nd Mix), Konami introduced DrumMania, a five-piece set of drum pads. The two games could be linked for use in "session play".

GuitarFreaks v4. Photo by tweisbach. CC BY-SA 2.0.

GuitarFreaks laid the foundations for later music-based games, such as "Guitar Hero" (2005) and "Rock Band" (2007). Gradually , "Guitar Hero" became more popular, perhaps because of its great selection of licensed music. In 2008, Konami responded by suing the developer.