Sept. 27th

James Hardy Wilkinson

Born: Sept. 27, 1919;

Strood, England
Died: Oct. 5, 1986

Wilkinson was a prominent figure in numerical analysis, as the author of most of the linear algebra routines produced by the NAG (Numerical Algorithms Group) [Oct 1]. The J. H. Wilkinson Prize for numerical software is named in his honor.

In 1960, George Forsythe [Jan 8] wrote: "In my opinion Wilkinson is single-handedly responsible for the creation of almost all of the current body of scientific knowledge about the computer solution of the problems of linear algebra."

After WWII, Wilkinson became Alan Turing's [June 23] assistant at the National Physical Lab (NPL) where he worked on the ACE (Automatic Computing Engine) [Feb 19] project and, although the computer didn't exist yet, wrote its floating-point arithmetic subroutines. After Turing left NPL, Wilkinson played a leading role in the development the Pilot ACE [May 10].

Phil the Radio Dog

Sept. 27 – Oct. 13, 1929

"Phil the Radio Dog" (aka "Philidog") was built by Henri Piraux of Philips Radio France, and made its debut at the first International Wireless Exhibition at Magic-City (an amusement park) in Paris.

Phil moved about on wheels, and had two photoelectric cells for eyes, connected to two motors, one powering the right-hand wheels, the other the left. When a light was moved near to him, "Phil" would 'bark', initially by sounding a horn, and later by playing a phonograph of a growl. This later version also added a set of electrically-charged touch-sensitive steel whiskers.

"Phil" was built by Philips primarily to demonstrate their new photoelectric cells, and was otherwise quite similar to Hammond and Miessner's Electric Dog from [June 7] 1912.

For more electric/robot dogs, see [April 30], [May 11], [Sept 27], [Nov 18].

Alan F. Shugart

Born: Sept. 27, 1930;

Chino, California
Died: December 12, 2006

Shugart was a pioneer of disk drive technology, but began his career at IBM as a field engineer, repairing punch card machines. In 1955 he transferred to the IBM San Jose lab where he worked on the 305 RAMAC [Sept 14], and eventually took on responsible for the company's disk storage products – IBM's most profitable business sector at the time. Among the groups reporting to Shugart was the team that invented the 8" floppy disk [May 1].

He joined Memorex in 1969, taking several hundred IBM engineers with him. His group shipped the Memorex 650 in 1972, the first commercially available read-write floppy disk drive.

He founded Shugart Associates in Feb. 1973, which introduced a lower-cost 8" floppy disk drive, and the first 5.25" floppy disk drive on [Aug 27], 1976, although Shugart himself had been forced out of the company in 1974.

He and Finis Conner started Seagate Technology [Nov 1] in 1979, which became one of the main manufactures of hard drives and tape drives. Their first product was a 5.25", 5 MB hard disk drive that sold for a mere $1,500 and became a cornerstone of the early PC market.

In 1996 he launched an unsuccessful campaign to elect Ernest, his Bernese mountain dog, to Congress.

Larry Wall

Born: Sept. 27, 1954;

Los Angeles, California

Wall, a linguist working as a sysAdmin at NASA, developed Perl [Dec 18], "the Swiss Army chainsaw of scripting languages" at the end of the 1980s.

Larry Wall (2007). Photo by Randal Schwartz. CC BY-SA 2.0.

He also co-authored with Tom Christiansen the standard textbook for the language – "Programming Perl" (often called "The Camel Book," because of the camel on the cover).

Wall's faith has influenced some of Perl's terminology, such as the name itself, a biblical reference to the "pearl of great price" (Matthew 13:46).

Wall was also the author of the rn USENET [Jan 29] client, and the "patch" tool for updating text files. He has easily won the International Obfuscated C Code Contest (IOCCC [April 11]) twice.

A quote: "Most of you are familiar with the virtues of a programmer. There are three, of course: laziness, impatience, and hubris."

LIFE's Planar IC
Sept. 27, 1960

In August 1959, Bob Noyce [Dec 12] asked Fairchild Semiconductor [Oct 1] co-founder Jay Last to begin developing an integrated circuit based on Jean Hoerni's planar process [Sept 26] and his (Noyce's) patent [April 25].

The first prototype, a flip-flop that integrated four transistors and six resistors onto a single chip, began working on May 26, 1960. However, the connections were etched into the silicon wafer. Two members of the development team, Isy Haas and Lionel Kattner, invented a much more commercially viable method (based around boron diffusion), and the first circuits using this approach started working on this day.

This chip was announced to the public in March 1961 via a press conference at the Institute of Radio Engineers conference in NYC, and a photograph was published in LIFE magazine on March 10, 1961.

Roy Thomas Fielding
Born: Sept. 27, 1965;
Laguna Beach, California

Fielding was one of the principal authors of the HTTP 1.1. specification, and the originator of the REST (Representational State Transfer) coding style. He was also a co-founder of the Apache HTTP Server project [Dec 1].

Fielding defined REST in his 2000 PhD dissertation, "Architectural Styles and the Design of Network-based Software Architectures", which he wrote in parallel with the HTTP 1.1 specification. Unlike SOAP [June 24] which is purely a protocol, REST acts as a set of guidelines for building Web services.

Does not Compute
Sept. 27, 1964

The phrase "Does not compute" originated in the sci-fi sitcom "My Living Doll", which aired for 26 episodes on CBS, starting today and lasting until March 17, 1965.

Bob Cummings plays Dr. Bob McDonald, a psychiatrist who is given charge of Rhoda Miller, a lifelike Amazonian android played by Julie Newmar (also TV's first Catwoman [Jan 12]).

Julie Newmar as Catwoman (1966-1967). Photo by ABC Television.

However, "Does not compute" hit the bigtime in the "Lost in Space" TV show (1965), as a catchphrase of the B-9 robot (aka, the Class B-9-M-3 General Utility Non-Theorizing Environmental Control Robot). The B-9 was endowed with superhuman strength and futuristic weaponry, but could also sing and play the guitar. It was designed for the show by Robert Kinoshita who also created "Robby the Robot" for "Forbidden Planet" [March 23].

GNU's Now Underway
Sept. 27, 1983

On the net.unix-wizards and net.usoft newsgroups, Richard Stallman [March 16] announced the development of a new OS:

"Starting this Thanksgiving I am going to write a complete Unix-compatible software system called GNU (for Gnu's Not Unix), and give it away free to everyone who can use it. Contributions of time, money, programs, and equipment are greatly needed."

In Jan. 1984, Stallman quit his job at MIT to work on GNU full-time, and in March 1985, he published the "GNU Manifesto," which became a central creed of the free software movement.

On [Oct 4] 1985, Stallman set up the Free Software Foundation (FSF), which began hiring developers to write software for the project. The basic components now include the GNU Compiler Collection (GCC), a C library, a debugger, GNU GRUB [June 28], GNU Emacs [Oct 2], and the GNOME desktop environment [March 3].

There's also an OS kernel, GNU HURD, but non-GNU kernels, such as Linux [March 14], can be utilized instead since HURD isn't quite production-ready as yet. The common combination of GNU software and the Linux kernel is officially known as GNU/Linux (and woe betide you if you should abbreviate it to just Linux!). As of Dec. 2019, there were over 450 actively maintained packages hosted on the GNU site.

The logo for GNU is a gnu's head, originally drawn by Etienne Suvasa. However, a bolder, simpler version, designed by Aurelio Heckert, is now de rigueur.

The Chang Modification
Sept. 27, 1988

John C. Dvorak reported on the "Chang Modification" in his "Inside Track" column in *PC Magazine*. A Taiwanese engineer has tinkered with the IBM AT [Aug 14] motherboard to drastically boost its performance. But on Dec. 27, Dvorak revealed the sad truth:

"The Chang modification is the addition of a large capacitor to the 14.318 MHz oscillation

circuit of a standard 12 MHz SUNTAC chip set-based motherboard slot. Adding the capacitor makes the clock act as if it were being modulated by a low-frequency component. This reduces the frequency of the 14.318 clock. Reducing the DOS timer frequency by half results in the appearance of it having twice the actual speed."

In other words, the machine's clock was being made to run at half speed, which tricked the CPU into thinking its software was running twice as fast.

For more Dvorak, see [April 1], [Dec 26].

Google's Birthday

Sept. 27, 1998

Google has marked this day as its birthday since 2006, but rather confusingly has also celebrated on other occasions, including Sept. 26, 2005, Sept. 7, 2004, and Sept. 8, 2003.

The reasoning given by the company for this behaviour is eminently logical: "The exact date when we celebrate our birthday has moved around over the years, depending on when people feel like having cake."

Another reason for settling on this day may be that the first birthday "Google Doodle" [Aug 20] was posted on this day in 2002.

Other dates Google could choose from include: when BackRub was first reported [Aug 29], and when the company was named [Sept 15].

Youngest Microsoft

Sept. 27, 2014

Ayan Qureshi from Coventry, UK became the youngest Microsoft Certified Professional when just five years and 11 months old. That's seven months younger than the whiz-kid who previously held the title.

Ayan was introduced to computers when he was only three by his father, who's an IT consultant. In no time at all, he developed a passion for MS Windows [Oct 26].

He told the BBC he found the exam difficult but enjoyable, and hopes to set up a UK-based tech hub one day.