March 23rd

Jean E. Sammet

Born: March 23, 1928; New York

Died: May 20, 2017

Sammet was a key member of the group which developed COBOL [April 8] in 1959, serving as chairman of the Statement Language Task Group and the Editing Committee. She was also a member of the CODASYL Language Structure Group from 1960. At IBM in 1961 she led the development of FORMAC (FORmula MAnipulation Compiler), the first widely used language for manipulating algebraic expressions.

She organized some of the earliest graduate computer science courses in 1956-1958 at Adelphi College, and later taught a course in Boston attended by Dennis Ritchie [Sept 9]. Her 1969 textbook "Programming Languages: History and Fundamentals" was the standard work on that topic for over a decade.

From June 1974 to July 1976, Sammet was the first female ACM [Sept 15] president.

James Henry Clark

Born: March 23, 1944; Plainview, Texas

Clark is known for his early research on computer graphics, and for being the founder of several major Silicon Valley firms, including Silicon Graphics (SGI) and Netscape Communications [March 25].

In 1978, Clark and Edwin Catmull [March 31] invented the Catmull-Clark subdivision surface, a 3D modelling technique for creating smooth surfaces. From 1979 to 1984, he worked on the "Geometry Engine", an early hardware accelerator for rendering computer images based on their geometry; the technology was the basis for several SGI products.

James H. Clark (2013). Photo by Knnkanda. CC BY-SA 3.0.

The story goes that on the day Clark resigned from SGI he also sent an email to Marc Andreessen [July 9] about forming a Web browser company, which eventually became Netscape.

In the late 1990's, Clark served as technical lead of the XML working group [Feb 10], notably contributing the "XML" name.

Clark's collection of yachts have included the 300-foot Athena, the 100-foot racing sailboat Comanche, and Hyperion, the world's largest sloop.

Donald M. Eigler

Born: March 23, 1953; Los Angeles, California

Eigler's research in nanotechnology includes amusing joint work with Erhard Schweizer on using a scanning tunneling microscope tip to arrange 35 xenon atoms to form the letters "IBM". The composition took 22 hours to complete, with a few breaks, and made the cover of *Nature* in April 1990.

This experiment showed that it was possible to position atoms with precise accuracy, the first step for building molecular-sized machines. However, it had to be carried out in a vacuum at ultra-cold temperatures achieved with liquid helium. If the temperature had risen above -243 C, then "IBM" would have fallen apart.

Other work by Eigler includes the invention of "quantum corrals," the "quantum mirage" effect, and a new technique for studying the magnetic properties of nanometer-scale structures.

In 2002 he built nanoscale logic circuits by employing the collisions of carbon monoxide molecules to represent logical operations. Each circuit was less than a trillionth of a square inch in size.

Eigler is also a trainer of service dogs, specializing in those that help people with mobility issues.

Forbidden Planet Released

March 23, 1956

"Forbidden Planet" (aka "Fatal Planet") is a sci-fi film directed by Fred M. Wilcox, and starring Walter Pidgeon, Anne Francis, Leslie Nielsen, and "Robby the Robot". Star Trek [Sept 8] creator Gene Roddenberry cited this movie as a major inspiration.

The story centers on a crew of explorers who land on the planet Altair IV ruled by the mysterious Dr. Morbius. Robby plays a mechanical servant built by Morbius using advanced knowledge gleaned from his study of the Krell, a long-extinct race that populated the planet.

Robby was actually designed by the Japanese-American engineer Robert Kinoshita, and built in mid-1955 for around $125,000. Kinoshita was also the Art Director for the TV series "Lost in Space" (1965) which featured a robot called B-9 [Sept 27]. Robby and B-9 met twice during the "Lost in Space" run.

Robby's name may have been influenced by Isaac Asimov's [Jan 2] short story "Robbie" (1940) about a robot that cares for children.

"Forbidden Planet" was the first mainstream film to feature music made entirely by electronic instruments. Most of the sounds were produced using a ring modulator invented by Clyde R. Keith at Bell Labs for telephony. The score was composed by Louis and Bebe Barron.

For more robot men, see [Feb 00], [Feb 24], [March 24], [April 16], [April 30], [July 17], [July 30], [Sept 15], [Nov 11], [Nov 30], [Dec 22].

Transac S-2000

March 23, 1958

The Philco Transac S-2000 was the first transistorized computer to be marketed commercially, although Philco had built an S-1000 for the NSA [Oct 24] in Nov. 1957 Both machines used discrete surface barrier transistors [Oct 14] instead of vacuum tubes; the integrated circuit hadn't been invented yet.

The S-2000 was fast (twice the speed of the rival IBM 7094 [Nov 30]) with an instruction set optimized for floating-point arithmetic. Also, its magnetic tapes could be read backwards as well as forwards, making it an excellent data processing machine. Saul Rosen [Feb 8] was the chief software designer.

The S-2000 was renamed the Model 210 when the faster Model 211 debuted in March 1960. After Philco was sold to the Ford Motors in 1961, the most successful member of the family, the Model 212, shipped in Feb. 1963.

Presidential Lanier 103

March 23, 1981

Jimmy Carter was the first former US president to write his memoirs on a computer – a Lanier Model 103 word processor. It included dual floppy 5.25" disk drives, which allowed it to run CP/M [June 22] or a word processing suite from one of the disk. It came packaged with a daisy-wheel printer, and cost around $15,000. It was advertized with the slogan "No problem".

A Philco Model 212. Photo by Doug Letterman. CC BY 2.0.

On this day, Carter, who had leased two Laniers, reported that he had made excellent progress. ''It's been surprisingly easy,'' he said. ''Only a couple of times, I've had to call Lanier and ask, 'How do you get out of this quandary?'" A company representative added that, ''he did so well that what normally takes two full days for an operator to learn he learned in a day.''

Carter's memoirs, "Keeping Faith: Memoirs of a President" were published in 1982, and one of the Lanier 103's is now on display in the Jimmy Carter Presidential Library in Atlanta.

No More Cards

March 23, 1991

Craig Shergold is a former cancer patient who received an estimated 350 million greeting cards, earning him a place in the Guinness Book of Records [Jan 28; March 1; Nov 18].

In 1989, doctors diagnosed him as having terminal brain cancer. A few months later, Shergold's doctor, Richard Hayward, saw how many get-well cards were hung up above his hospital bed, and suggested Shergold try for the Guinness record for the most greeting cards.

On Sept. 25, 1989 the attempt was reported in the UK *Daily Mirror* tabloid with the headline "You're a card, Craig", and the steady flow of cards turned into a deluge.

Eventually, the Royal Mail had to assign the Shergold's home its own postal code because of the volume of mail, and the family later moved house to try to stem the flood.

On this day, Shergold spoke to the media with his mother and Virginia billionaire John Kluge, who had paid for the operation that cured him. His mother said, "It's a miracle - but please, no more cards."

Variations of the plea (for a Craig Sheldon, Craig Sheppard, Craig Shelton, Craig Shelford, etc.) are still being distributed online, making this one of the most persistent urban legends.

Guinness World Records has retired the record and asked that the public no longer respond to requests for greeting cards.

Game Boy Advance SP

March 23, 2003

Nintendo released the "Game Boy Advance SP" in North America, an updated "Game Boy Advance" [April 21]; the "SP" stood for "SPecial".

It featured a front-lit screen and clamshell design similar to the later Nintendo DS [Nov 21], and was available in the colors cobalt and platinum. It was half the size of the "Game Boy Advance" and used a rechargeable lithium ion battery

Within a year, over 6.5 million units had been sold in the US, a record at the time. Over 40 million units were sold worldwide.

An irritating design flaw was that if you wanted to use headphones with a conventional

1/8″ phone jack, you had to buy an adapter that plugged into the unit's power socket. As a result, you couldn't use headphones and an external power source at the same time.

Nintendo released the Nintendo DS the next year, calling it the "third pillar" in its console lineup, complementing the "Game Boy Advance" and GameCube [Sept 14]