August 28th

SciAm

Aug. 28, 1845

The first issue of *Scientific American* (SciAm to aficionados) was published by Rufus M. Porter as a four-page weekly newspaper. Many people mark the magazine's golden age as post-WWII, when Gerard Piel (publisher), Dennis Flanagan (editor), and Donald H. Miller, Jr. (general manager) took over. Flanagan teamed his subeditors with working scientists, which led to pieces written by such figures as Albert Einstein, Claude Shannon [April 30], and J. Robert Oppenheimer.

Jan. 1957 marked the appearance of the first "Mathematical Games" column by Martin Gardner [Oct 21], who went on to write nearly 300 superb articles, many of which had a strong computing flavor. He was followed by Douglas Hofstadter's [Feb 15] short-lived, but enjoyable "Metamagical Themas" column and A.K. Dewdney's [Aug 5] "Computer Recreations" column.

Two famous issues dedicated solely to computing were published in [Sept 00] 1966 and 1984.

When Flanagan retired in 1984, the magazine's circulation was well over 600,000, having grown fifteen-fold since 1948.

Edward Hance Shortliffe

Born: Aug. 28, 1947;

Edmonton, Alberta, Canada

Shortliffe was the principal developer of MYCIN in the early 1970s, one of the first rule-based AI expert systems. It was developed in the same lab that produced the earlier DENDRAL expert system [Jan 20].

MYCIN read in clinical data supplied by a physician and could then generate a diagnosis and recommend treatment. In tests it outperformed Stanford medical school faculty, but was never used in practice due to concerns about responsibility if its diagnosis proved incorrect. Nevertheless it spurred the development of other rule-based systems.

Joshua J. Bloch

Born: Aug. 28, 1961;

Southampton, New York

Bloch was responsible for numerous Java features, including the collections framework, the java.math package, and the assert mechanism.

He's also the author of "Effective Java", often voted the best-ever textbook on the language, which was first published on June 15, 2001. At the time, James Gosling [May 19], the inventor of Java, remarked, “I sure wish I had this book ten years ago. Some might think that I don’t need any Java books, but I need this one.”

These comments suggest that Gosling first required the text on June 15, 1991. Although the language was first named in [Jan 00] 1995, it had evolved from Sun’s Green Project, which started on [April 8] 1991. Therefore, Gosling first required Bloch's text just 68 days after the project began.

Two quotes from Bloch:

“Computer science is an immature discipline, and I aim to keep it that way.”

“To be a software developer, you have to be an optimist – otherwise, it would feel like a losing battle.”

Sheryl Kara Sandberg

Born: Aug. 28, 1969;

Washington, D.C.

Sandberg is best known as the COO of Facebook [Feb 4], which she joined in March 2008. She made the company profitable for the first time by employing an advertising model that took advantage of its social network structure.

Before Facebook, she had spent six years at Google, where she was instrumental in developing the company’s lucrative advertising programs, AdWords [Oct 23] and AdSense [June 18].

In March 2014, Sandberg sponsored the "Ban Bossy" campaign, aimed at banning the word bossy from general use due to its perceived harmful effect on young girls.

Sheryl Sandberg (2013). Photo by Michael Wuertenberg, World Economic Forum. CC BY-SA 2.0.

Two quotes:

“I want to tell any young girl out there who’s a geek, I was a really serious geek in high school. It works out. Study harder.”

“A truly equal world would be one where women ran half our countries and companies and men ran half our homes.”

PC ’76

Aug. 28-29, 1976

Personal Computing ’76 (PC’76) is considered by many to be the first national microcomputer show, although it was preceded by the somewhat smaller *Trenton Computer Festival* [May 2]. PC'76 was organized by John Dilks, then a field engineer at Western Electric, and held at the Shelbourne Hotel in Atlantic City. Over its two days, an

estimated 5,000 people attended.

The Apple I [July 00] made its public debut at the show, sharing booth space with Stan Veit's [Dec 25] Computer Mart store.

At first, Steve Jobs [Feb 24] and Steve Wozniak [Aug 11] turned down Dilks' invitation to exhibit at the event. "They said they were cash-poor," Dilks recalled. Dilks set them up with a travel agent on the West Coast who was organizing a group flight to the show. He also arranged for the convention hotel to extend them credit for a room.

Jobs and Wozniak carried the Apple I board in a cigar box on the TWA flight to Philadelphia. Sitting in the row behind them was Lee Felsenstein [April 27] (the designer of the SOL-20 [next entry]), who pronounced the Apple I "thoroughly unimpressive."

During the convention, Veit's Italian mother-in-law was shocked by the torn state of Jobs' trousers, "Young man, your backside is sticking out of holes in those jeans! You are NOT going to be in my booth like that. Take 'em off and I'll sew them up, now!"

Sol-20 Presented

Aug. 28-29, 1976

Bob Marsh, Lee Felsenstein [April 27] and Gordon French started designing the Sol-20 between April and July of 1975. Their company, Processor Technology, unveiled the result at PC '76 [previous entry].

The motherboard utilized an Intel 8080 [April 18], and a five slot S-100 bus [next entry]. It was one of the earliest machines to include a keyboard interface, and a built-in video driver which allowed it to be attached to a TV. It also supported floating-point arithmetic, on a separate board designed by George Millard.

The Sol-20 is remembered for its sleek good looks. The case was painted 'IBM blue' and the sides

The Sol-20. Photo by Michael Holley.

were made of oiled walnut, salvaged from a gun stock manufacturer. It was named after King Solomon when Felsenstein proposed: "Let's advertise it as having the wisdom of Solomon".

The Sol-20 became known as the most reliable machine on the market, and was the dominant PC in 1977. About 10,000 were produced until 1979 (5000 as kits, 5000 pre-built), before it was de-throned by the Apple II [June 5].

S-100 Named

Aug. 28-29, 1976

One important decision made at the PC '76 [two entries back] was to start calling the bus in the MITS Altair 8800 [Dec 19] the "S-100" rather than the Altair bus. A large industry had grown up around the bus, providing cards that offered extra CPUs, memory, video, and other add-ons. Other firms specialized in bus-related software – including Micro-soft [April 4]. Many companies didn't like the current name since it felt like free advertising for MITS.

The S-100 name was coined by Harry Garland and Roger Melen, co-founders of Cromemco [Dec 11], while on a flight coming to the show. It was widely adopted, except by Ed Roberts [Sept 13], the MITS boss (not that surprisingly). He claimed that the new appellation was "an attempt by a small group to steal the Altair bus", and to "not give recognition to MITS for its pioneering efforts".

The S-100 became an official standard in 1978, and was renamed again as the IEEE-696 bus.

According to folklore, the bus almost didn't materialize. The first Altair didn't use one, but that machine was lost while being shipped to the offices of *Popular Electronics* to be photographed for the famous cover [Dec 19]. As a result, the published picture featured an empty case.

More importantly, the loss gave Roberts a chance to redesign the machine. In particular, he discarded the 100-wire ribbon cable that linked internal components, replacing it with a rigid backplane (i.e. a bus).

IBM Meets Microsoft, Part 2

Aug. 28, 1980

Prev: [Aug 22] Next: [Sept 22]

IBM representatives again met with Microsoft, this time to sign it as a consultant. The company was given the task of developing the software specs for IBM's upcoming PC [Aug 12], and Jack Sams (director of software development at IBM) also asked Bill Gates [Oct 28] for alternatives to CP/M-86 [May 19].

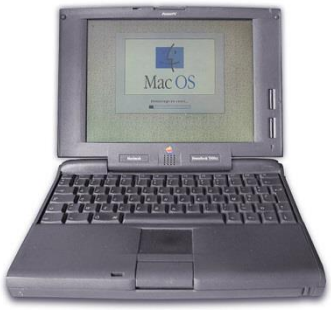
Paul Allen [Jan 21] knew of a possibility: Tim Paterson [June 1] of Seattle Computer Products (SCP) had written a 16-bit operating system called QDOS (Quick and Dirty Operating System; the name was quickly changed to 86-DOS).

One decision made at this meeting, which was to have major consequences, was whether IBM or Microsoft would buy 86-DOS. Sams let Microsoft purchase it because he thought, "If we'd bought the software, we'd have just screwed it up."

PowerBook 5300

Aug. 28, 1995

The Apple PowerBook 5300 was the company's first laptop to use a PowerPC processor [Oct 00]. Sadly, it wasn't an auspicious beginning for the chip.



A French PowerBook 5300cs. Photo by Serged.

Three weeks after the machine's release, fewer than 1,000 had been sold. In any case, they all had to be recalled eventually, due to a fault in the lithium-ion batteries that caused two units to burst into flames. Problems with lithium-ion batteries are far from rare; see [June 12; Aug 19]

The batteries weren't the only shortcoming. The laptop's case was prone to cracking, its electrical plug would often snap off its cord, and its power system couldn't run certain combinations of hardware add-ons.

After repeated failures and widespread criticism, Apple halted the model's production on May 10, 1996. Today it's often cited as among the worst Apple product.