March 18th

Dorr Eugene Felt

Born: March 18, 1862; Newark, Wisconsin

Died: Aug. 7, 1930

Felt invented the Comptometer, an early calculator, and the Comptograph, a version that could print results.

Felt's description of how he made the first Comptometer prototype may strike a chord with today's amateur makers: "It was near Thanksgiving Day of 1884, and I decided to use the holiday in construction of the wooden model. I went to the grocer's and selected a box which seemed to me about the right size for the casing. It was a macaroni box, so I have always called it the macaroni box model. For keys. l procured some meat skewers from the butcher around the corner and some staples from a hardware store for the key guides and an assortment or elastic bands to be used for springs. When Thanksgiving Day came I got up early and went to work with a few tools, principally a jack knife." Felt was granted a patent for his design on Oct. 11, 1887.

The Comptometer could perform addition significantly faster than earlier calculators because one number could be added to another in a mechanical register as it was being input. Subtraction was carried out by nines-complement arithmetic, and multiplication by repeated addition.

Comptometers were in continuous production from 1887 until the mid 1970's, and running a "Comptometer school" was a profitable business in the early 1900's, teaching students how to best use the machine.

The other popular adding machine of the period was the Odhner Arithmometer [Aug 10]. For fast multiplication, Otto Steiger's Millionaire [May 7] was most connoisseur's choice.

John Richardson Mainwaring Simmons

Born: March 18, 1902; Colombo, Ceylon

(his parents were English missionaries)
Died: Jan. 14, 1985

Simmons is often called the "Father of the Office Computer" because of his managerial role in the development of the LEO I (Lyons Electronic Office I) [Sept 5] at J. Lyons and Co. In 1951 the LEO 1 became the first computer dedicated to running business applications in a commercial environment.

In Oct. 1947 the Lyons board agreed to Simmons's proposal to send two senior managers, Raymond Thompson and Oliver Standingford, to the US to study the ENIAC [Feb 15]. During their stay, they heard, much to their surprise, of the EDSAC [May 6] being developed by Maurice Wilkes [June 26] at Cambridge University.

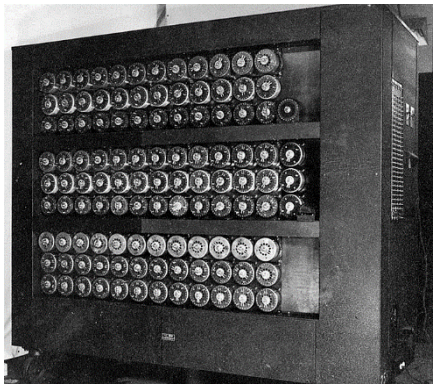
Wilkes' team was short of money and staff, so Simmons suggested a deal in Nov. 1947, where Lyons would donate £3000 to the project in return for the rights to make a commercial version. Shortly afterward, Lyons employed John Pinkerton [Aug 2] to head the Lyons team, and construction of the LEO began in Aug. 1949.

Enigma Busting Bombes

March 18, 1940

The first bombe became operational in Hut 1 at Bletchley Park [Aug 15] on this day. Its task was to decrypt messages encoded using the German Enigma machine [Feb 23].

This bombe – dubbed 'Victory' – was only out of action for 42 hours in its first 14 months of service, and only then so it could be modified. Its other nicknames were "the Bronze Goddess" and "the Oracle of Bletchley".



A Bletchley Park Bombe.

It had been designed by Alan Turing [June 23] and Gordon Welchman based on the bomba [Aug 16] machines developed by Polish cryptologists. One change was that the Polish bomba assumed that the message key at the beginning of each message was doubly encrypted, but that had fallen out of favor with the Germans. Instead the bombe based its attack on assuming that a particular word or phrase (a crib) was present somewhere in the encrypted text.

Over 200 bombes were eventually built at the British Tabulating Machine Company [Feb 18] by a team led by Harold 'Doc' Keen [Feb 18].

Unfortunately, the bombe's mechanical hardware proved too slow for more complex ciphers, which led to the development of the Heath Robinson [June 1] and the Colossus [Jan 18] machines.

IE 5 Released

March 18, 1999

Prev: [Aug 16] Next: [Aug 27]

This version of Internet Explorer (IE) was a significant upgrade that supported XML [Feb 10], XSLT, enhanced support for CSS [Oct 10], and the indispensable "favicon" [next entry]. Perhaps its most important new feature was the XMLHttpRequest API, which became very important

later for Ajax [Feb 18] by making it much simpler to transfer XML and other data between a browser page and a Web server.

IE5 had cornered over 50% of the browser market by early 2000, and over 80% just before the release of IE6 [Aug 27]. Its domination was helped by it being bundled with MS Windows, which became an issue in the US v. Microsoft court case [April 3].

In any case, the first browser war was over, and Microsoft had won. At least until the arrival of Firefox [Nov 9], Google Chrome [Sept 2], Safari [June 23], and Opera [July 14].

Favicon Introduced

March 18 1999

The favicon (favorite icon) was introduced in IE 5 [prev. entry] making it possible for a website to display a small icon next to its URL in a user's favorites list. The favicon's cuteness factor meant that browsers soon began rendering them in all sorts of places, though they wouldn't become an official part the language until HTML 4.01 [Dec 18].

The favicon was the invention of Microsoft developer Bharat Shyam. The story goes that Shyam waited until late in the day until a less experienced (i.e. less fossilized) Project Manager came on duty before requesting permission to check the favicon code into the IE codebase. The trendy manager thought the feature was cool, would give the browser an edge, and wasn't a critical feature, so waived it on through. The next day he was reprimanded for having decided so quickly.

Fly Me to Your Domain

March 18, 2002

".aero" (short for aeronautics) was the first top-level Internet domain based on a single industry. The domain was approved in 2001 for a five-year period, and began accepting registrations on this day.

The domain is managed by SITA (Société Internationale de Télécommunications Aéronautiques), a multinational owned by members of the air transport industry. SITA also runs the "Dot Aero Council" (DAC), a forum for discussing the future of ".aero".

Half of an Aero bar. Photo by Evan-Amos.

In the UK at least, Aero is perhaps better known as the name of an aerated chocolate bar patented on July 11, 1935 by Rowntree's, a distinguished confectionery. Rowntree's other chocolatier breakthroughs include the Kit Kat, also from 1935. "KitKat" was the codename for Android 4.4 [Nov 5].

iPhone 4 Leaks

March 18, 2010

Just prior to the introduction of the iPhone 4 [June 29], Apple suffered a major embarrassment when one of its software engineers lost a prototype while celebrating his birthday at the Gourmet Haus Staudt, a German beer garden in Redwood City, California.

He was field-testing (or should that be garden-testing?) the prototype which was disguised as an iPhone 3GS. He left the bar, forgetting the phone, which was innocently picked up by another patron. This kind individual tried to return it to Apple, but nobody took him seriously.

A few weeks later Gizmodo got their hands on the phone, and a teardown appeared on its website on April 19, one-and-a-half months before Steve Jobs [Feb 24] was scheduled to introduce the device at Apple's Worldwide Developers Conference. The article quickly became the most popular story ever on Gizmodo, viewed millions of times.

On April 23, California's "Rapid Enforcement Allied Computer Team" raided the home of Gizmodo editor Jason Chen, and confiscated various items including four computers, two servers, assorted cool-looking gadgetry, and a box of business cards.

The job title of the engineer who lost the iPhone 4 lists "security engineering" as one of his areas of expertise.

The Spamhaus DDoS

March 18 2013

In March 2013, CyberBunker, an ISP named after its home in a former NATO bunker in the Netherlands was added to the blacklist of Spamhaus.org [Dec 12], an anti-spam organization.

Beginning on this day, Spamhaus became the target of a distributed denial of service attack (DDoS [Sept 6]) exploiting a long-known vulnerability in the Domain Name System (DNS [Nov 18]) The attack was at a previously unreported scale, peaking at 300 gigabit-per-second (Gbps).

Spamhaus hired Cloudflare, a DDoS mitigation company, to assist them, but the attack was so large that it briefly even knocked Cloudflare offline. Cloudflare later dubbed it "The Attack that Almost Broke the Internet."

On April 26, 2013, the owner of CyberBunker was arrested in Spain for his part in the attack He was later released pending trial.

The 300 Gbps record has been broken many times since then, with many attacks probably never publicly revealed. In Feb.

2020, Amazon Web Services (AWS [March 19]) defended against a 2.3 terabit-per-second (Tbps) DDoS attack. Previously, GitHub [Feb 8] held the record with a 1.35 Tbps attack against the site in 2018.

Self-Driving Car Death

March 18, 2018

The first fatality caused by a self-driving car occurred in Tempe, Arizona.

The Uber [July 5] Volvo XC90 had been driving autonomously for 19 minutes at a steady speed of 43mph, when it detected an object six seconds away on the four-lane road. The object was finally identified as a person with a bicycle, loaded with shopping, just two seconds before the collision.

It was nighttime, but the car utilized a roof-mounted LiDAR and 10 radar sensors, providing 360° coverage around the vehicle.

One issue may have been that the car's software was following Arizona laws which state that a pedestrian crossing a street outside a crosswalk should yield to on-coming cars.

Nevertheless, the system determined that emergency braking was required, which is normally performed by the vehicle's human backup. However, the system wasn't designed to alert that human. Unfortunately, a subsequent review of the driver-facing camera in the car showed that the backup was looking down until half a second before the impact. Police believed that the person was streaming "The Voice" over Hulu [March 12] at the time of the collision.
