# March 7th

# Alexander Graham Bell Day

### March 7, 1876

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On this day, Alexander Graham Bell was granted US patent 174,465 for an "Improvement in Telegraphy," which permitted the transmission of sounds telegraphically; the device would later become better known as the telephone.

Bell's fans celebrate the occasion as Alexander Graham Bell Day, which is a bona fide holiday in Nova Scotia, where Bell lived in his later years.



Alexander Graham Bell (c. 1917). Photo by the Moffett Studio -Library and Archives Canada.

Within a days of receiving the patent, the Bell Company [Jan 1]) was besieged by lawsuits and patent challenges (an estimated 500). However, the US Supreme Court ultimately upheld Bell's claim.

On July 11, 1877, a few days after the new Bell Telephone Company was established, Bell married Mabel Hubbard. His present to his bride were 1,487 of his 1,497 shares in the business. Bell's success with the telephone also prompted him to give her a ring.

When the first regular phone service was established in 1878,

Bell suggested answering the phone with "Ahoy-hoy" as the standard greeting. However, Thomas Edison [Feb 11] urged people to say "Hello". "Ahoy" was first referenced as a nautical term in the 1751 novel "The Adventures of Peregrine Pickle" by Tobias Smollett, wheras "Hello" has only been around since 1827.

In "The Simpsons'" TV show [Feb 15], Mr. Burns has been known to answer the telephone as Mr. Bell intended.

Bell's work on the phone was part of his wider interest in aids for hearing, motivated by his wish to help his mother and wife who were both deaf [June 2]. On his desk, Bell kept a photograph of his wife; written on the back, in his own hand, was: "the girl for whom the telephone was invented."

He had tried to interest Western Union, who then ran all the telegraph lines in America [Jan 27], in the device. They wrote back saying, 'After careful consideration of your invention, which is a very interesting novelty, we have come to the conclusion that it has no commercial potential.'

Bell's numerous inventions included a metal detector that nearly saved the life of US President James Garfield (who was also the first president to talk on a telephone), and the Hydrodome, a speedboat with hydrofoils, that set a world marine speed record of 70.86 mph on Sept. 9, 1919.

Bell considered the photophone, an optical communication device, the "greatest invention I have ever made, greater than the telephone." In 1880, Bell and an assistant, Charles Summer Tainter, used it to transmit a voice message by light from a roof top to their lab 200 meters away.

Bell was responsible for revitalizing the moribund National Geographic Society, and relaunching *National Geographic* magazine, coining the slogan "The World And All That Is In It," and promoting its copious use of photographs. Thousands of adolescents of the 1950's and 60's were eternally grateful for Bell's initiative.

During Bell's funeral [Aug 4], every phone in North America was silenced for a minute

### Steven Anson Coons

#### Born: March 7, 1912; Palatine, New York Died: August ??, 1979

Coons' work in computer graphics includes the eponymous "Coons patch", a mathematical surface which smoothly links four curves defined by four points with the help of "blending functions".

The research was published as the MIT report, "Surfaces for Computer-aided Design of Space Forms" in June 1967, but is better known today as "The Little Red Book" (this particular Project MAC [July 1] report had a red cover). It became the foundation for a whole range of graphical surface forms, including b-splines and NURBs, and also found application in image warping and keyframe animation. It should not be mistaken with the 1964 publication by Chairman Mao Zedong, which included his famous remark that "political power grows out of the barrel of a gun". Nor should it be confused with Monty Python's [Oct 5] "Big Red Book" (1971) which has a blue cover.

The Coons patch was first utilized in Ivan Sutherland's [May 16] Sketchpad system [Jan 7] in an extension written by Timothy E. Johnson; both Sutherland and Johnson had been Coon's students.

During WWII, Coons worked on the design of aircraft surfaces, which motivated him to develop the maths behind his later work. After the war, he taught in MIT's Mechanical Engineering department where he was an early advocate of computers. Before the war he had been a freelance photographer.

The ACM SIGGRAPH "Steven Anson Coons Award for Outstanding Creative Contributions to Computer Graphics" is given in oddnumbered years to honor a person's lifetime contribution to graphics. It's considered the field's most prestigious award.

### Frances Elizabeth (Betty) Holberton (née Synder)

Born: March 7, 1917;

Philadelphia, Pennsylvania Died: Dec. 8, 2001

Holberton was the co-lead programmer with Jean Bartik [Dec 27] of the ENIAC [Feb 15], and one of the six "ENIAC Refrigerator Ladies" [May 00]. Bartik and Holberton's missile trajectory program was chosen as the main demo to show off the ENIAC's capabilities during its grand unveiling ceremony [Feb 15].

She had learnt to program at the Moore School in Aug. 1945, in a class taught by Adele Goldstine [Dec 21].



Betty Holberton in front of the ENIAC (1947). US Army Photo.

When J. Presper Eckert [April 9] and John Mauchly [Aug 30] resigned from the Moore school [March 31] in 1946, Holberton (with Bartik and Antonelli) joined them at the newly created Eckert-Mauchly Computer Corporation (EMCC [Dec 8]).

Holberton and Mauchly assumed joint responsibility for inventing the C-10 instruction set for the BINAC [April 4]. This was the first machine code that used mnemonic names, such as "a" for add and "b" for bring. C-10 was used on the UNIVAC 1 [March 31], and greatly impressed Grace Hopper [Dec 9] when she joined EMCC in the summer of 1949.

Holberton also worked closely with Eckert to develop the BINAC's magnetic-tape I/O system. One of her achievements was to get the machine to play a tune, "For He's a Jolly Good Fellow," the first example of computer music [Aug 7].

Holberton helped design the layout of the UNIVAC's control panels, and wrote the first statistical analysis package, which was employed for the 1950 census after the Census Bureau purchased the first UNIVAC.

Bartik and Holberton coprogrammed SORT/MERGE in 1952, a routine that read and sorted data stored on UNIVAC's tape drives. Donald Knuth [Jan 10] called it "the first major 'software' routine ever developed for automatic programming." Holberton said of the work: "I remember bringing a deck of cards to the office on 1215 Walnut Street and turning them face down and making decisions and building piles. I built the logic of binary sorting from a deck of cards without ever having...anybody tell me anything about how it ought to be done."

Holberton participated in the development the COBOL standard [April 8], and edited its Dec. 1959 report. She was also active in revisions to the FORTRAN standard [Feb 26] that resulted in FORTRAN 77 (1980) and Fortran 90 (1991).

On her first day of classes as an undergraduate at the University of Pennsylvania, Holberton's math professor asked her if she wouldn't be better off at home raising children.

### Motorola 6800 March 7, 1974

Today's issue of *Electronics* magazine included a two-page story describing the new Motorola [Sept 25] MC6800, the company's first full 8-bit microprocessor.

The 6800 had a 16-bit address bus that could access 64 KB of memory and an 8-bit bidirectional data bus. Its architecture and instruction set were strongly influenced by the PDP-11 [[an 5].

It was part of a large family, the M6800 series, which also included serial and parallel interface ICs, RAM, ROM and other support chips. A significant feature was that the ICs only required a single fivevolt power supply at a time when most other microprocessors required three voltages each.

The project had started in 1971, led by Tom Bennett, as a response to Intel's 4004 [Nov 15]. Chuck Peddle [Nov 25] joined the team in 1973 after the 6800 processor design had been mostly completed, but he contributed to several of the peripheral chips

The Sphere 1 was the first microcomputer to use a 6800, but probably the most successful 6800-based machine was the SWTPC 6800 [Nov 00] designed by Gary Kay, and released in Nov. 1975. In the long run though, the 6800 proved to be more popular in computer peripherals, point-of-sale terminals, and arcade game devices.

## Research In Motion March 7, 1984

"Research In Motion" (later RIM, then BlackBerry Ltd) was founded by Mike Lazaridis and Douglas Fregin in Waterloo, Canada. The idea had come to Lazaridis one evening when he saw a TV news story about football players taking ballet lessons. At one point, the phrase "Poetry in Motion" was uttered, and the company's name was decided.

A major milestone was RIM's agreement with Ericcson's Mobitex wireless network in 1988. It let RIM create pagers that operated as two-way communication devices, a revolutionary concept at the time. After success with basic pagers, the RIM 900 became the company's first keyboard-based pager in 1996.

It helped that the Mobitex network was very popular with the military and police forces, firefighters, and ambulance services. After 9/11 [Sept 11], the US government became RIM's biggest customer.

On [July 12] 1999, RIM released its first BlackBerry device, the 850, with mobile email as its "killer app" [Sept 8]. The BlackBerry 5810 debuted on [March 4] 2002, adding voice calling capabilities so it could replace a phone. On [Sept 12] 2006, RIM started testing the waters beyond the business market, by bringing out the first in a line of consumer-friendly Pearl devices which added a digital camera and multimedia capabilities.

At its peak, there were 85 million BlackBerry subscribers worldwide. But like Nokia [May 12], RIM was caught napping by the iPhone [Jan 9], and BlackBerry gradually lost its dominant position to iOS and Android [Nov 5]. In 2015, the company began to release Android-based smartphones.

Support for all surviving BlackBerry phones ended on Jan. 4, 2022, with the company saying the devices would "no longer reliably function".

### Apple eMate 300 March 7, 1997

The low-cost Apple eMate 300 was a PDA aimed at the education market running Newton OS v2.1 [Aug 3]. It was memorably packaged in a translucent (but rugged) green clamshell case.

It used a 25 MHz ARM processor, 1 MB of RAM, and 2 MB of flash memory (unusual at a time when most PDAs used battery-backed RAM). It was the only Newton device with a keyboard, albeit about 85% the size of a standard one. Its 8 MB ROM included a suite of applications, including word processing, spreadsheet, and drawing tools.



The Apple eMate 300. Photo by Ryan Schultz. CC BY-SA 3.0.

Aside from the green case, purple, clear, red, and orange prototypes were developed, but never put into production.

Although Steve Jobs [Feb 24] predicted in 1997 that the eMate had a "bright future", once he returned as Apple CEO [Sept 16], it was cut along with the rest of the Newton line. However, some of its design elements were reused in the iMac [May 6] and iBook [July 21].

The eMate was Batgirl's (Alicia Silverstone) chosen computer in the much disparaged 1997 "Batman & Robin" movie. Hence, the machine was sometimes called the "BatNewt" [Jan 12]. For another Apple appearance in that film, see [March 20].

## Symbian Worm March 7, 2005

The security company F-Secure announced the detection of the first mobile messaging worm, CommWarrior. It was transmitted through the Mobile Messaging Service (MMS) and Bluetooth [May 20] supported by the Symbian OS [June 24] on the Nokia Series 60.

When a message carrying the hungry helminth was opened, it attempted to install itself on the phone, and utilize the address book to randomly send a copy of itself to another device. This would be repeated whenever the phone was switched on, along with a Bluetooth message send every minute or so.

The worm, which had been spreading since Jan., was later used as the basis of several other Symbian-based endoparasites, such as Doomboot.

## Webdriver Torso Created March 7, 2013

"Webdriver Torso" is a YouTube [Feb 14] account that used to post strange videos to the site. Most of them were eleven seconds long, and consisted of slides that appeared for about a second each. Each slide had a white background containing a red and blue rectangle, and played a wave tone. The corner of each video contained the words "aqua.flv - slide (a number with four digits)".

After a long period of fairly frequent submissions, the posting rate dropped drastically after it reached 624,735 uploads on May 4, 2017.

Wired magazine [Jan 2] was the first to spot the account in Feb. 2014, which it revealed in a feature on bizarre YouTube clips. The account quickly became a source of speculation, including that the videos were a digital version of "numbers stations" popular during the Cold War for spies to decode messages.

YouTube belatedly explained that the account was merely a testing tool for video quality. Not everyone was convinced since this didn't explain all the mysterious posts, including an "Aqua Teen Hunger Force" episode, a Rick Astley [July 27] silhouette, and footage of the Eiffel Tower.

When Google is searched for "Webdriver Torso", its logo will cycle through a series of images typical of the site's videos.