February

First Car Phone
Feb. 1913

Los Angeles inventor Earl C. Hanson became the first person to receive a wireless phone call in his car. It was transmitted from Long Beach to his vehicle parked on Lookout mountain, some 35 miles away. One slight drawback was that the car had to be fitted with 10 foot poles fore and aft, supporting aerial wires and high-voltage insulators, which dangled somewhat precariously over the driver and passengers.

A short article about the experiment appeared in the Feb. 1913 issue of *Popular Mechanics*, but the test may date from the previous year when Hanson was 19.

Despite the publicity, there had been earlier radio telephony tests. In 1907, Cyril Frank Elwell had demonstrated voice communication between Stockton and Sacramento, and went on to found the Federal Telegraph Company, Palo Alto's first large industry, and first home of radio engineering.

The JOHNNIAC Runs
Feb. 1953

RAND Corp's [Oct 1] JOHNNIAC (John von Neumann Numerical Integrator and Automatic Computer) was so named because of its use of the von Neumann [Dec 28] architecture. It became operational early in 1953 and was finally decommissioned on Feb. 11, 1966, making it the longest operational computer, clocking up over 50,000 hours. However, the oldest computer still running (discounting long periods when it was mothballed) is the Harwell Dekatron [April 00], in service for 30 years, and still operational today (albeit after some serious restoration work).

The JOHNNIAC. Photo by Andrew Lih. CC BY-SA 2.0.

As with von Neumann's own IAS machine [June 10], the JOHNNIAC made the initial mistake of utilizing Selectron tubes [Aug 10] for its main memory. In March 1955, more reliable (and faster) core memory [May 11] replaced the Selectrons, and a massive 12k-word drum was added as secondary storage. A transistor-based adder supplanted the original vacuum tube unit in 1956.

The JOHNNIAC holds several firsts – it could run reliably for hundreds of hours at a time, it pioneered the use of a time-sharing service (JOSS) [May 00], employed the first rotating drum printer and possessed, for a short while, the largest core memory in the world.

Harwell CADET
Feb. 1955

The Harwell CADET (Transistor Electronic Digital Automatic Computer – read backwards) was most likely the first fully transistorized computer in Europe, and perhaps the first in the world, just beating Bell Lab's TRADIC [March 14] to the title. It sported over 300 point-contact transistors, and ran its first test program some time this month.

CADET was developed by Ted Cooke-Yarborough in the electronics division of the Atomic Energy Research Establishment (AERE) at Harwell in England. He had been inspired after attended Bell Labs' first symposium on the transistor in 1951.

Some historians think the CADET was beaten to 'first place' by the Manchester University Transistor Computer (the "Manchester TC"), a prototype of which was demoed on [Nov 16] 1953. However, the TC wasn't completely transistorized because it still relied on vacuum tubes to generate a clock signal. The CADET didn't deign to use valves to generate pulses, but that meant it did run rather slower.

Prior to the CADET, Cooke-Yarborough supervised the production of the Harwell Dekatron, working with fellow designers Dick Barnes and Gurney Thomas. The 'Harwell' is the oldest computer still running [April 00].

Kludge Described
Feb. 1962

A kludge (or kluge) is a workaround, or quick-and-dirty solution, that is clumsy, inelegant, inefficient, difficult to extend and hard to maintain. In other words, it's a good description of lots of software.

The "Oxford English Dictionary" gives the word's origin as Jackson W. Granholm's Feb. 1962 "How to Design a Kludge" article which appeared in *Datamation*. However, the very similar word, kluge, was common Navy slang in WWII for any piece of electronics that worked well on shore but consistently failed at sea.

For example, Agnes Nolan Underwood in her 1947 essay "Folklore from GI. Joe" in the *New York Folklore Quarterly* (Vol 3, No. 4, Winter) ends with an account of the shaggy dog story, "Murgatroyd the Kluge Maker".

The "Jargon File" [Oct 2] believes that kludge derives from British military slang for the Scotish kludge or kludgie, meaning "a common toilet".


Sinclair MK14
Feb. 1978

Clive Sinclair's [July 30] company, "Science of Cambridge", launched a microcomputer kit, the MK14 ("MK" for "microprocessor kit"), based on National Semiconductor's SC/MP ("Scamp") 8-bit processor. Indeed, the entire kit was closely derived from National Semiconductor's SC/MP Introkit, a low-cost evaluation board.

The MK14 shipped with 256 bytes of RAM, 512 bytes of ROM, a rubbery calculator-style keyboard, a LED seven segment display, and a few I/O ports.

Crucially, it was five times cheaper (price: £39.95) than its closest micro kit competitor, with the result that about 20,000 (or perhaps 50,000) were sold during its lifetime. This was Sinclair's first computer product, and its wild success paved the way for Sinclair's ZX80 [Jan 29] and others.
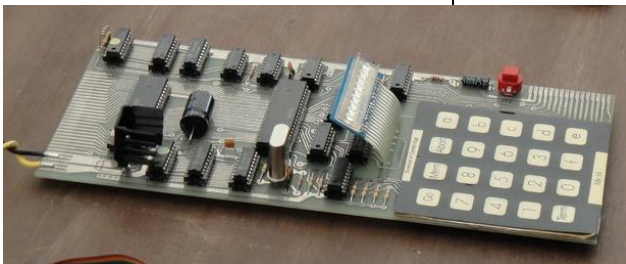
Science of Cambridge's MK14 (1978). Photo by Steve Elliott. CC BY-SA 2.0.

The MK14's popularity was greatly helped by magazines and hobbyists coming up with improvements and modifications to its basic design. Expansions included a better keyboard, a cassette interface, a text and graphics video module, sound card, and EPROM programmer. RAM chips could be added, to offer up to a total of 640 bytes.

During its development, Sinclair had been lukewarm about the prospects for personal computers, so the MK-14 project had been handed off to Chris Curry, and the kit produced by National Semiconductor. Curry left Sinclair's company in 1978, to found Acorn Computers [Dec 5] with Herman Hauser.

"Micro Men", a BBC TV drama (2009), focused on the rivalry between Sinclair and Curry during this time. Sinclair has remarked, "it was a travesty of the truth." The programme features a stellar galaxy of 1980's PCs from the UK.

Alice and Bob
Feb. 1978

The Feb. issue of the *Communications of the ACM* (CACM) featured "A Method for Obtaining Digital Signatures and Public-key Cryptosystems" by Ron Rivest [May 6], Adi Shamir [July 6], and Leonard Adleman [Dec 31].

The article, now reverently called the "RSA paper", describes the types of communication possible with public key cryptography, although there had already been a less formal introduction to these concepts by Martin Gardner [Oct 21] in the [Aug 00] 1977 issue of *Scientific American*.

The RSA paper outlines different communication situations by referring to their effects on two characters, Alice and Bob. Rivest later remarked that they had chosen the names in order to maintain the traditional use of "A" and "B," but also to make communication scenarios easier to explain by using the pronouns "he" and "she." However, some people have suggested that the 1969 movie, "Bob & Carol & Ted & Alice" may have been the inspiration.

Alice and Bob soon began turning up everywhere in the cryptographical literature. This prompted a detailed examination of their lives by John Gordon in an after-dinner speech at an April 1984 crypto conference.

It appears that Bob is a stockbroker, and Alice a stock speculator, and their favorite hobbies are trying to defraud insurance companies and playing poker over the phone. Naturally, Alice and Bob are wanted by both the tax authorities and the secret police, and even Alice doesn't entirely trust Bob because of some unspecified past incident.

Inevitably, Alice and Bob were joined in their adventures by others alphabetical characters. For example, in Aug. 1985, Charles Bennett, Giles Brassard, and Jean-Marc Roberts started their paper, "How to Reduce Your Enemy's Information," with a tale about Alice, Bob, and Eve, an eavesdropper who could modify a transmission arbitrarily.

The cast expanded dramatically (with over five new people) in the 1994 textbook, "Applied Cryptography", by Bruce Schneier [Jan 15]. He added a Carol but went with Trent rather than a Ted.

IBM 5120
Feb. 1980

The 5120 was the last evolution of IBM's 5100 [Sept 9] and 5110 'portable' series. It had the distinction of being IBM's lowest-priced computer up to that time, and also the heaviest desktop device ever: a gut-wrenching 105 lbs.

Aside from the weight, it was well designed, and took up less space on the desktop than the 5100, and featured a 9-inch monochrome monitor, which improved on the 5-inch screen on the 5100.

However, returning to the weight issue – the 5120 actually consisted of three parts – an IBM 5110 Model 3, a 5114 external diskette unit, and a 5103 dot-matrix printer. The floppy-drive cabinet could hold one or two 8-inch floppy drives, weighing 15 lbs. each. This meant that the total system could weigh in at 132 lbs. Nevertheless, it was aimed at general small businesses, not just accredited weightlifters.

The next 51xx machine would be the IBM 5150, better known as the IBM PC, released on [Aug 12] 1981.

Mr. Macintosh
Feb. 1982

Steve Jobs [Feb 24] suggested that Andy Hertzfeld [April 6], the primary Mac software architect, add a "Mr. Macintosh" to the machine's features [Jan 24].

Jobs explained: "He pops up every once and a while, when you least expect it, and then winks at you and disappears again. It will be so quick that you won't be sure if you saw him or not. We'll plant references in the manuals to the legend of Mr. Macintosh, and no one will know if he's real or not."

Jobs eventually focused on adding the little man to the menus: "One out of every thousand or two times that you pull down a menu, instead of the normal commands, you'll get Mr. Macintosh, leaning against the wall of the menu. He'll wave at you, then quickly disappear. You'll try to get him to come back, but you won't be able to."

Jobs recruited the Belgian artist Jean-Michel Folon — a well-respected cartoonist and painter — to design Mr. Macintosh. Folon drew a whimsical character in a fedora wearing a Mackintosh raincoat.

Hertzfeld asked Susan Kare [Feb 5] to animate Mr. Macintosh, making this her first work for Apple. However, Kare doesn't remember the character, although she did find a drawing in her sketchbooks that could possibly be a pixel art mock-up.

Unfortunately, the Mac's paltry 128KB of RAM meant that there wasn't enough room for the Mr. Macintosh bitmaps, but the drawing hooks that Hertzfeld added to the menu routines were left in the code.

Aside from a few commemorative pins, evidence of Mr. Macintosh's existence can also be found etched into the logic boards of a few early Macintosh prototypes.

Omnibot Unleashed
Feb. 1985

The Omnibot was a Japanese toy robot manufactured by Tomy, with a name that proved so popular that it was later applied to an entire line-up.

The original device was controlled via a wireless remote, and could be driven around a room, and its right arm and claw-like hand could move. The Omnibot could even "speak" via a walkie-talkie interface.

The Omnibot 2000. Photo by Rama. CC BY-SA 3.0 fr.

Early Omnibots had a cassette tape player built into the chest area, which could record and play back sequences of commands, as well as play regular audio. A built-in digital clock allowed the playback of commands at specified times.

The Omnibot disappeared in the mid-1980's, but after the merger of Tomy and Takara in 2006, the company unveiled a new Omnibot, the i-SOBOT, which was later certified by Guinness World Records as "the world's smallest humanoid robot in production".

For more robot men, see [Feb 24], [March 23], [March 24], [April 16], [April 30], [July 17], [July 30], [Sept 15], [Nov 11], [Nov 30], [Dec 22].

TWAIN Released
Feb. 1992

TWAIN is an API and communications protocol that regulates communication between software and imaging devices, such as scanners and digital cameras.

The TWAIN website notes that the word comes from Rudyard Kipling's "The Ballad of East and West" (1889):

'Oh, East is East, and West is West, and never the twain shall meet'

This was repurposed to reflect the difficulty at the time of TWAIN's introduction of connecting scanners and PCs.

From a literary point of view, this line of Kipling's has often been seen as problematic, and he's even been accused of being a racist because of it. Kipling scholars argue that later lines in the same verse actually state the opposite – that "strong men" can look past such differences and accept one another.

The uppercase use of TWAIN led some computer users to believe that it was an acronym. The TWAIN group turned this into a contest to come up with a suitable acronymic expansion, but nothing suitable was found. However, "Technology Without an Interesting Name" has been widely adopted.