Feb. 18th

BTM Bombes Feb. 18, 1902

On this day, Robert Porter founded the British Tabulating Machine Company (BTM) to sell Herman Hollerith's [Feb 29] punched card machines in the UK.

BTM sales gradually increased, and the company began making its own machines in the 1920's. During WWII this led Bletchley Park [Aug 15] ask it to build mechanical aids to help break the Enigma ciphers [Feb 23]. This approach was heavily promoted by Alan Turing [June 23] and Gordon Welchman, based on the success of the Polish bomba [Aug 16] devices.

The English bombe was designed by BTM chief engineer Harold 'Doc' Keen, in a topsecret project codenamed "CANTAB", and the first one became operational at Bletchley on [March 18] 1940. By the end of the war, BTM had built over two hundred.



A wartime Bletchley Park Bombe.

John Womersely [June 20] joined BTM in 1950 and recruited Andrew Booth [Feb 1] (creator of the APEXC) to design an inexpensive computer for the firm. The result was the Hollerith Electronic Computer (HEC 1; [June 16]), which may well be Britain's first massproduced business computer. It was built by Raymond 'Dickie' Bird based on Booth's design In 1959 BTM merged with former rival Powers-Samas to become International Computers and Tabulators Limited (ICT), which later became part of ICL [July 9].

Robert (Bob) Albrecht (aka George Firedrake and the Dragon) Born: Feb. 18, 1930; Mason City, Iowa

Albrecht co-founded the People's Computer Company (PCC) with Dennis Allison on [Oct 1] 1972, and went on to publish a range of periodicals and books that introduced microcomputers and BASIC [June 10] to the masses.

These included "My Computer Likes Me when I Speak BASIC", (1972), the first best-seller about microcomputers, shifting a cool quarter of a million copies.

Albrecht brought an Altair 8800 [Dec 19] to the first meeting of the Homebrew Computer Club on [March 5] 1975.

Douglas Mark Rushkoff Born: Feb. 18, 1961;

NYC

Rushkoff is responsible for coining terms such as "viral media", "digital native", and "social currency", and wrote the first syndicated column on cyberculture for *The New York Times*.

His first book on cyberculture, Cyberia, was canceled in 1992 by Bantam, because the editors feared the Internet would be "over" by the time the book was ready. It was eventually published in 1994 by HarperCollins.

Rushkoff often cites two events as pivotal moments for cyberculture – the day Netscape became a public company on [Aug 9] 1995, and when AOL bought Time Warner on [Jan 10] 2000. He labels these as the times when the non-profit character of the Internet was overtaken by corporations and venture capital.

Aside from journalism, Rushkoff has collaborated with Genesis P-Orridge (aka Neil Andrew Megson) as the keyboardist for "Psychic TV", an experimental video art and music group. He's also been named one of the "world's ten most influential intellectuals" by MIT.

Burroughs B5000 Feb. 18, 1961

The Burroughs B5000 Information Processing System was the first mainframe in a series aimed at business. It was designed by a team led by Robert Barton.

The B5000 was the first commercial machine to employ virtual memory and a hardware stack. It was also tag-based which meant that code and data could be distinguished in memory so the hardware could better protect itself from illegal use or change. It also supported multiprocessing with two CPUs, and ran at the then-astonishing speed of 1 MHz. It was built using transistors although later versions adopted IC's.

The B5000 never caught on in scientific circles because it didn't support FORTRAN, but came to dominate banking services because it did support COBOL and ALGOL [Jan 11]. Its ALGOL 60 dialect was designed and implemented by Tony Hoare [Jan 11] as a one-pass compiler that could execute as fast as the machine could read its punched cards.

There was no B5000 assembler; all system software was written in an extended variant of ALGOL called ESPOL. This made the B5000's MCP (Master Control Program) the first OS written in a high-level language. Incidentally, it was Bob Barton, the B5000's head designer, who said: "Systems programmers are the high priests of a low cult."

The B5000 was followed by the B5500 which used disks rather than drum storage, then the B5700 which allowed multiple CPUs to share disks.

The B5000 wasn't quite the first machine to use virtual memory; the Manchester Atlas prototype [Dec 7] beat it by a few years, but it used paging while the B5000 utilized segmentation.

EDS Prisoners Come Home Feb. 18, 1979

In Dec. 1978 two Electronic Data Systems (EDS) executives, Bill Gaylord and Paul Chiapparone, were arrested on suspicion of bribery in pre-revolutionary Tehran. Bail was set at \$13 million.

H. Ross Perot [June 27], head of EDS, recruited a crack team led by a retired US Army colonel, Arthur D. "Bull" Simons. Their mission was to rescue the men.



Bull Simons. (c) The Arthur D. Simons Center.

On Feb. 11, a mob attacked the prison in Tehran, releasing all the prisoners, including Gaylord and Chiapparone. However, neither of them had passports and so couldn't depart the country legally. Bull Simons solved that problem by dividing the EDS employees into two groups. The less suspicious left by air; the more vulnerable, including the two fugitives, travelled to Turkey by road. It was a dangerous 450 mile, twoday trip across northwest Iran, but they safely crossed the border, and arrived back in the US on this day.

With Ross Perot's support, the EDS story became a 1983 nonfiction book, "On Wings of Eagles", written by Ken Follett. In 1986 a five-hour mini-series of the same name was released, starring Burt Lancaster as Simons and Richard Crenna as Ross Perot.

The EDS executives had been lucky. Later that year, on Nov. 4, fifty-two American diplomats and citizens were seized at the US Embassy by Iranian students supporting the revolution. They were held hostage for 444 days until Jan. 20, 1981

Paul Allen Resigns Feb. 18, 1983

Paul Allen [Jan 21] resigned as executive Vice President of Microsoft, but remained a member of the company's Board of Directors.

A few months previously, Allen had been diagnosed with Stage 1-A Hodgkin's lymphoma, but gave another reason for leaving in his 2011 autobiography, "Idea Man": "One evening in late December 1982, I heard Bill [Gates] and Steve [Ballmer] speaking heatedly in Bill's office and paused outside to listen in. It was easy to get the gist of the conversation. They were bemoaning my recent lack of production and discussing how they might dilute my Microsoft equity by issuing options to themselves and other shareholders. Unable to stand it any longer, I burst in on them and shouted. 'This is unbelievable! It shows your true character, once and for all !! "

That night Ballmer came to Allen's home to apologize, and later, Gates sent him a 6-page handwritten apology letter.

In early 1983, Allen and Gates tried to hash out a deal for him

to leave, a deal he says resulted in "a lowball offer for my stock: five dollars a share." Allen held out for \$10 per share, but Gates wouldn't accept it, so Allen left without selling his stock – a wise move as it turned out.

Other juicy tidbits from "Idea Man" include that Allen had to stop playing chess with Gates because Gates was such a bad loser that he'd knock the pieces off the board. Also Gates had a habit of patrolling the Microsoft car park at weekends to check out who had come in to work.

Pay-per-Click Presented Feb. 18-21, 1998

Pay-per-click (PPC) has an advertiser pay a publisher (typically a website owner) when his ad is clicked upon. On this day, Jeffrey Brewer, CEO of Goto.com, demoed a prototype search engine using PPC at the TED8 conference [Feb 23] in Monterey. However, credit for the idea is given to Goto.com's founder, Bill T. Gross [Feb 8].

PPC requires that advertisers bid on a search term or phrase. The winners can submit adverts for that term, which will be shown when a user looks for the term using the search engine. The advertiser who places the highest bid has their advert placed at the top of the list of results.

Today's main PPC providers – Google AdWords, Microsoft adCenter, and Yahoo! Search Marketing – all operate a bidbased model. The bulk of Google's \$182 billion revenue in 2020 came from advertising (around \$147 billion).

There are several earlier web sites that claim to have debuted PPC. For example, Planet Oasis was developed by Ark Interface II in 1996. By the end of 1997, over 400 major brands were paying the site between \$0.005 and \$0.25 per click.

Ajax Described

Feb. 18, 2005

Ajax (Asynchronous JavaScript and XML) is a set of client-side programming techniques to create asynchronous Web applications. The client program can send and retrieve data from a server in the background without it interfering with the display and behavior of the Web page holding that data.

The idea was developed in 1998 at Microsoft by their Outlook Web App team as the XMLHttpRequest scripting object. It first appeared in the MSXML library which was shipped with Internet Explorer [Aug 16] 5.0 in March 1999.

The term Ajax was coined on this day in an article by Jesse James Garrett entitled, "Ajax: A New Approach to Web Applications", which combines the XMLHttpRequest mechanism with techniques used in Gmail [April 1] and Google Maps [Feb 8].