August 30th

John William Mauchly

Born: Aug. 30, 1907;

Cincinnati, Ohio
Died: January 8, 1980

Mauchly and J. Presper Eckert [April 9] built the first general-purpose electronic digital computer, the ENIAC [May 00], and unveiled it to the public on [Feb 14] 1946. They were also deeply involved with the development of von Neumann's EDVAC [April 12], especially in the engineering of its "stored program" concept, although their contribution has tended to be over shadowed by von Neumann's [June 30].

John Mauchly.

In 1947, Mauchly and Eckert founded the first commercial computer company, the Eckert-Mauchly Computer Corporation (EMCC) [Dec 8], where they developed the BINAC [Oct 9] and UNIVAC [March 31].

Before the war, Mauchly had attended a scientific meeting where one of the other attendees (unknown to Mauchly) had ties to a communist group. During the post-war McCarthy era, this 'association' was considered sufficient to have Mauchly's security clearance revoked for almost two years. This deprived EMCC of vital government contracts, and was one factor in the company's eventual collapse.

Mauchly proposed the first high-level language, Short Code, in [July 00] 1949, and may have been the first person to use the term "personal computer" on [Nov 3] 1962. He was also the founder and first vice-president of the Association of Computing Machinery (ACM) [Sept 15].

Mauchly and John Atanasoff [Oct 4] had always argued about who should receive credit for creating the first computer. Eventually, the matter was taken to court, triggered by Sperry Rand [Jan 25], owner of the ENIAC patent, attempting to charge royalties for its use. The judge ruled the patent invalid in [Oct 19] 1973, which essentially meant that Atanasoff was deemed the inventor.

Mauchly's wife, Kathleen Antonelli [Feb 12], noted that her husband pronounced the ENIAC name as "EN-ee-ack", unlike the more common "EEN-ee-ack". Antonelli was also one of the ENIAC's "Refrigerator Ladies" [May 00].

First IMP Delivered

Aug. 30, 1969

(Labor Day weekend)

An Interface Message Processor (IMP) acted as a link between the ARPANET [July 29] and a computer, essentially performing the duties of a simple network router. However, the original IMPs were about three feet wide and six feet tall, so weren't particularly imp-like.

The IMP idea was first suggested by Wesley Clark [April 10] at an ARPANET Design Session organized by Lawrence Roberts [Dec 21] in April 1967 (although others historians give the credit to Donald Davies [June 7]). The IMP's development team at BBN [Nov 00] was led by Frank Heart, and included Bob Kahn [Dec 23] working on communications theory, Severo Ornstein [Oct 13] in charge of hardware, and Will Crowther [March 11] in the programming group.

The IMP's hardware was based on the Honeywell DDP-516 with a generous 12K of memory. The DDP-516 had made quite an impact at the preceding 1968 Fall Joint Computer Conference where one had been suspended from the ceiling by hooks and whacked with a sledge hammer while running to show how robustly built it was.

BBN delivered the first IMP to Leonard Kleinrock's [June 13] research group at UCLA's Network Measurements Center at UCLA on this day. There had been fears that it would arrive late, so BBN, at great expense, had it transported by air from Massachusetts. Graduate students Vinton Cerf [June 23], Steve Crocker [Oct 15], Bill Naylor, Jon Postel [Aug 6], and Mike Wingfield were charged with its installation. By Sept. 2, the IMP was connected to the group's SDS Sigma-7 mainframe.

The second IMP was delivered to the SRI on Oct. 1 and the first message between the two IMPs was sent on [Oct 29], 1969.

BBN's initial contract was to build four IMPs, but eventually 15 were constructed. Massachusetts Senator Edward Kennedy was so pleased about BBN's million-dollar deal, that he sent a telegram to the company congratulating them on building the "Interfaith Message Processor".

Debating the Lighthill Report

Aug. 30, 1973

The Lighthill report was the informal name for the paper "Artificial Intelligence: A General Survey," written by James Lighthill for the British Science Research Council. Lighthill was then the Lucasian professor at Cambridge, and primarily a researcher in fluid dynamics and aero-acoustics.

Although the report supported AI research related to automation and medicine, it was highly critical of AI's performance in areas such as robotics and language processing.

The report became more widely known on this day when it became the subject of a live debate broadcast by the BBC in front of an audience at the Royal Institution. The proposition under discussion was: "The general purpose robot is a mirage".

Lighthill (who argued for the proposition) went up against a team consisting of Donald Michie [Nov 11], John McCarthy [Sept 4] and Richard Gregory (a British psychologist). Strangely, their arguments against the proposition were rather weak, except for a couple of minor points scored by McCarthy.

Shortly afterwards, the British government terminated most of its support for AI research except at three universities: Edinburgh, Sussex, and Essex. This was one of the many cuts that heralded the worldwide "AI winter" [Jan 00; Oct 28].

AI research in the UK didn't revive on a large scale until 1983, when the Alvey Project began, mainly in response to a fear of the Japanese Fifth Generation Project [April 14].

EMAIL Copyrighted

Aug. 30, 1982

V.A. Shiva Ayyadurai is perhaps best known for his controversial claim that he was the "inventor of e-mail", based on software he wrote as a 14-year-old student at Livingston High School (in New Jersey) in 1979 (or perhaps 1978). The system, called EMAIL, gave hospital employees a digital mailbox where they could exchange messages and attachments. On this day he registered a copyright for his program.

In 2012, several organizations, including the *Washington Post* and the Smithsonian Institution, repeated Ayyadurai's assertion, triggering a flood of complaints by Internet pioneers.

Most historians agree that email began in 1970 or 1971 when Ray Tomlinson [April 23] sent the first text message between two ARPANET-connected computers .

The day after Tomlinson's death, Ayyadurai tweeted: "I'm the low-caste, dark-skinned, Indian, who DID invent #email. Not Raytheon [the company which employed Tomlinson while he was working on the ARPANET], who profits for war & death. Their mascot Tomlinson dies a liar".

According to Ray Tomlinson: "The first email was sent between the two machines shown in this photograph... On the left, foreground, is the Teletype KSR-33 on which the first email was typed." Photo taken at BBN, circa 1970.

For an alternative view on the origins of e-mail, see [Dec 00].

Apple v. Franklin Ruling

Aug. 30, 1983

In the case of Apple Computer v. Franklin Computer Corp., it was determined that software, specifically the Apple II OS, was protected by the US Copyright Act of 1976.

The case had been brought by Apple after the company discovered that the Franklin Ace 1000 clone of the Apple II [June 5] reused a substantial amount of Apple's OS, including comments that listed a Apple programmer's name and the Applesoft brand.

Franklin admitted using the code but argued that it wasn't protected by US copyright laws because the software only existed in a machine-readable format and didn't contain a copyright notice.

One result of the ruling was that Apple was able to force Franklin to withdraw its clones from the market. Also, Franklin agreed to pay $2.5 million in damages to Apple.

More importantly in the long run was that the decision allowed IBM to force IBM PC clone makers to stop using its BIOS. This encouraged the creation of the Phoenix BIOS ([July 10] 1984) and AMI BIOS, which led to an explosion in the popularity of PC-compatible machines.

Street Fighter Released

Aug. 30, 1987

Capcom's [May 30] "Street Fighter I" was the first competitive fighting arcade game. It was developed by Takashi Nishiyama, who drew inspiration from real-life martial art styles that he was studying at the time.

The game introduced many of the conventions that later became standard, such as the six button controls. However, it was the next version, "Street Fighter II: The World Warrior" (1991) which made this game type insanely popular; it grossed over $10 billion. One of its innovations was to give players a choice of game characters, each with different signature moves.

On Dec 23, 1994, Universal Pictures released "Street Fighter", directed by Steven E. de Souza and starring Jean-Claude Van Damme, Raul Julia, and Ming-Na. Van Damme turned down the role of Johnny Cage in "Mortal Kombat" ([Aug 18] 1995) to do this film.

Goodbye WWMCCS

Aug. 30, 1996

The US Worldwide Military Command and Control System (WWMCCS (pronounced "wimex")) was created in response to the Cuban Missile Crisis (Oct. 1962). It consisted of a loose federation of around 160 computers, at nearly 100 different locations. Around 30 command centers used Honeywell 6000 machines, running a specially secured variant of Honeywell's General Comprehensive Operating Supervisor (GCOS). GCOS had been called GECOS, with GE standing for "General Electric" until Honeywell acquired GE's computer division [Sept 30].

On this day, after some 30 years of service, WWMCCS was deactivated, having been replaced by the Global Command and Control System (GCCS). The transition was so sensitive that the DOD didn't disclose the exact date of the switch until after it was completed, to prevent attempted exploits.

The GCCS employed Sun Microsystems [Feb 24] Sparcserver 1000s as servers, Sun SPARCstation 20s [April 9] as user workstations, and a mix of other machines running Sun's Solaris [Sept 4].

Optix Pro Released

Aug. 30, 2002

Optix Pro was Trojan horse malware that allowed a hacker to remotely control the infected system, giving him the ability to access files, record keystrokes, and stream video from the machine's webcam.

Arguably, the software did include a number of features that would make it useful as a legitimate remote management tool, but, largely due to its ease of use, it quickly became the tool of choice for amateur hackers.

Optix's functionality was similar to Back Orifice [Jan 27], NetBus, and Sub7 but more sophisticated and lethal. For example, it had the ability to circumvent most of the firewall and anti-virus products of the time.