August 22nd

Robert Allen Pease

Born: Aug. 22, 1940;

Rockville, Connecticut Died: June 18, 2011

Pease designed several "bestseller" integrated circuits which have remained in production for decades. These include the LM331 voltage-to-frequency converter, and the LM337 adjustable negative voltage regulator.

He wrote a popular monthly column called "Pease Porridge" in *Electronic Design*, and was the author of eight books, including *Troubleshooting Analog Circuits*, which became a standard benchtop reference.

Pease's office at National was notorious messy, and at one stage he won a messiest desk contest run by the *San Jose Mercury News.* Indeed, since the other entries were in no way up to his standard, they awarded him first, second, and third prizes.

Michael John Aldrich

Born: Aug. 22, 1941;

Welwyn Garden City, UK Died: 19 May 2014

Aldrich invented online shopping in 1979 when he connected a TV to a real-time transaction processing system via a telephone link. The system employed videotex [June 8] as a simple menu-driven interface.

He followed this with the Teleputer in 1980 which linked a 14-inch color TV to a box running a version of CP/M [June 22] on a Zilog Z80 [March 9] together with a Prestel chip set supporting a modem, character generator and auto-dialler. The Teleputer was used in the Gateshead Shopping Experiment [May 12]).

Masatoshi Shima

Born: Aug. 22, 1943; Shizuoka, Japan

Shima was one of the coinventors of the Intel 4004 [Nov 15], along with Ted Hoff [Oct 28], Stanley Mazor [Oct 22], and Federico Faggin [Dec 1].

Shima was working at the Japanese calculator manufacturer Busicom in 1969 when Intel was tasked with implementing the LSI logic for a new calculator. Shima relocated to the Intel offices in Santa Clara for six months to act as technical liaison with Busicon.

When he arrived in April 1970, he discovered that no progress had been made since the functional specifications had been finished in December. Busicom was so upset that Intel nearly lost the contract to Mostek [Nov 15].



Masatoshi Shima (1972). Courtesy of Masatoshi Shima.

Shima was recruited by Intel in Nov. 1972 to design the 8-bit 8080 [April 18], and moved to Zilog in 1975 with Faggin to develop the Z80 [March 9], which was instruction set compatible with the 8080. This was followed by the 16-bit Z8000 in 1979.

SHARE Formed Aug. 22 (or 15), 1955

SHARE, which offered technical support for IBM machines, is generally considered the first computer user group. It grew out of the Digital Computer Association (DCA) based in Los Angeles, which was primarily a social organization. indeed, DCA was sometimes said to stand for the Drunkard's Computing Association. The association had been set up by R. Blair Smith, a respected IBM 701 sales manager [April 7].

In August 1955, SHARE'S "secretary pro tem," Fletcher Jones of RAND [Oct 1], sent out invitations to all 17 (or perhaps 22) organizations that owned new IBM 704s [May 17] to attend SHARE's inaugural meeting.

By its first anniversary, SHARE'S membership stood at 62 organizations, and because the group represented many of IBM's largest customers, they came to have a significant influence. For instance, SHARE members participated in the development of PL/1 [June 25] as part of the "3x3" group.

SHARE also acted as a clearinghouse for software developed by its members. For example, in 1959 SHARE released the SHARE Operating System (SOS), originally for the IBM 709, and later ported it to the IBM 7090 [Nov 30]. SOS was one of the first examples of open-source [Feb 3] software.

Other notable user groups, in chronological order of their foundation, include DECUS [March 00], USENIX [May 15], the Amateur Computer Society (ACS [May 5]), the Amateur Computer Club (ACC [Dec 13]), the Homebrew Computer Club [March 5], ACGNJ [June 13], A.P.P.L.E. [Feb 21], and the Chaos Computer Club (CCC) [Sept 12].

PLATO Aug. 22-25, 1961

The first academic paper on PLATO (Programmed Logic for Automatic Teaching Operations) was presented at IRE WESCON in San Francisco by Donald Bitzer [Jan 1], P. Braunfed, and W. Lichtenberger. PLATO was a computer-assisted instruction system developed by Bitzer and Daniel Alpert at the University of Illinois. The first version, PLATO I, was operating on the local ILLIAC I [Sept 1] some time during 1960. It used a TV set as a display and a special keyboard for navigating the system's menus.

PLATO II, which debuted in 1961, could support two users at once, which arguably made it the first time-sharing system. Bitzer has long said that PLATO would have been granted a patent for time-sharing if only the University of Illinois hadn't lost his paperwork for almost two years. The other main contender for first time-sharing system is the Compatible Time-Sharing System (CTSS [May 3]) at MIT, which became operational in November 1961.

PLATO III, running on a CDC 1604 given to the group by CDC's CEO William Norris [July 14], could manage up to 20 terminals simultaneously. This included a remote terminal located near the state capitol at Springfield High School. PLATO III also introduced the TUTOR programming language for designing teaching modules for the platform. It was developed by biology graduate student Paul Tenczar in 1967.

PLATO I, II, and III had been funded by small grants from the military, but the National Science Foundation granted the team steady funding in 1967. This led to the creation of the Computer-based Education Research Laboratory (CERL) at the university, and the release of another version, PLATO IV [July 00], in 1972.

TALE-SPIN Aug. 22-25, 1977

James R. Meehan presented TALE-SPIN at IJCAI'77, the first interactive program for writing stories by employing rules for defining character behavior and a set of facts about the world. When running interactively, it was able to ask questions to fill in other details.

A typical sample: "Once upon a time George Ant lived near a patch of ground. There was a nest in an ash tree. Wilma Bird lived in the nest."

Earlier work of this type included the "automatic novel writer" (1971) by Sheldon Klein which generated 2100-word murder-mysteries. It was programmed in FORTRAN V [Feb 26] on a Univac 1108 [May 29]. Klein cited Roald Dahl's short story "The Great Automatic Grammatizator" (1953) as a primary influence.

In the 1960's, Joseph E. Grimes was the first to apply a grammar-based approach to the problem, to generate folk tales which colleagues suggested he call "Grimes' Fairy Tales."



The Engine. From "Gulliver's Travels" (1726) by Jonathan Swift.

A fictional system, "The Engine", appeared in Jonathan Swift's "A Voyage to Laputa" (part 3 of "Gulliver's Travels", 1726) – a twenty-foot square frame for the automatic generation of books on "philosophy, poetry, politics, laws, mathematics, and theology, without the least assistance from genius or study."

For more literary shenanigans with computers, see [Feb 1; Aug 1; Sept 9; Sept 11; Oct 26; Dec 25].

IBM Meets Digital Research Aug. 22, 1980

Previous: [Aug 21]; Next: [Aug 28]

There are conflicting stories about what happened when IBM went to meet Digital Research's founder, Gary Kildall [May 19].

Bill Gates [Oct 28] is quoted in "Fire in the Valley" as saying "Gary was out flying" that day, but Kildall always denied the implication, telling the authors of "Hard Drive" that he had flown to the Bay Area on a business trip.

Instead IBM and its lawyers met with Kildall's wife, Dorothy McEwen, and presented her with a non-disclosure agreement (NDA). On the advice of her attorney Gerry Davis, Dorothy refused to sign it without Gary's approval.

In one version of the story, Kildall returned in the afternoon, signed the NDA, but turned down IBM's offer to buy CP/M [June 22] outright for \$250,000. He preferred to license it at \$10 a copy.

However, IBM's Jack Sams told the authors of "Hard Drive" that the sticking point was that IBM couldn't get Kildall to agree to develop a 16-bit version of CP/M in the tight time schedule IBM required.

Whatever the reason, IBM left Digital Research without an operating system.

PizzaNet

Aug. 22, 1994

In August 1994, Santa Cruz Operation (SCO) [Jan 00] and Pizza Hut announced PizzaNet, "a pilot program that enables computer users, for the first time, to electronically order pizza delivery from their local Pizza Hut restaurant via the worldwide Internet."

PizzaNet has been called the first e-commerce application,

although NetMarket was probably the first [Aug 11].

The system utilized NCSA Mosaic [Sept 28] to send a pizza order to a server at Pizza Hut headquarters in Wichita. The order was then relayed via modem to an SCO Open Server system at the customer's nearest Pizza Hut franchise.

The first public PizzaNet demo was conducted on a UCSC campus patio. More than 100 media people showed up. One of the questions asked by the techsavvy crowd was supposedly, "Does the pizza actually come out of the computer?" A kindly engineer answered, "No, the technology for that isn't quite there yet."

During the demo, an order for 20 or so pizzas was sent perfectly through PizzaNet. However, the delivery driver got lost on his way to the campus, and a full hour went by before the pizzas were delivered.

The next night [Aug 23], SCO's house rock band, Deth Specula, made more history by broadcasting the world's first live Internet concert from the same campus.

Chrono Trigger Aug. 22, 1995

Square released the "Chrono Trigger" game for the SNES [Nov 21]. A group of adventurers must travel through time to prevent a global catastrophe.

Several of the game's features were revolutionary, including the possibility of different endings, a time-based battle system, and plot-related side quests.

Square dubbed the three developers the "Dream Team": Hironobu Sakaguchi [Nov 25], the creator of Square's "Final Fantasy"; Yuji Horii, creator of "Dragon Quest" [May 27]; and Akira Toriyama, a manga artist known for his work on "Dragon Quest" and "Dragon Ball".

NIPRNET Memo

Aug. 22, 1999

The US Department of Defense (DoD) issued a memo requiring all US military systems to switch to the NIPRNet (the Nonclassified Internet Protocol Router Network) by Dec. 15, rather than access the Internet directly. NIPRNet is currently the largest private network in the world, playing a role analogous to the 1980's MILNET [April 4]

NIPRNet, and its siblings, SIPRNet, and JWICS, were previously part of the Defense Data Network (DDN) [April 4]

SIPRNet (the Secret Internet Protocol Router Network) is for sending classified information up to the "Secret" level between US military systems. NIPRNet and SIPRNet are referred to colloquially as nipper-net and sipper-net (or simply nipper and sipper).

JWICS (the "Joint Worldwide Intelligence Communications System") is for even more classified information, up to the "Top Secret" level. JWICS (pronounced JAYwicks) was allegedly one of the networks perused by Chelsea Manning [Nov 28].

The separation of military networking into NIPRNet, SIPRNet, and JWICS is one reason why its not uncommon to see military users with multiple computers on their desks. Indeed, the clutter can be much worse. since there's a wide range of other secure communications networks outside of the DoD, including FBINet, Homeland Secure Data Network, NSANet, and the Department of State's OpenNet, OpenNet+, and ClassNet. I wonder where the passwords for all those systems are safely stored?