Sept. 26th

Irving Gould

Born: Sept. 26, 1919;

Toronto, Ontario
Died: Dec. 17, 2001

Gould is called the financier who saved Commodore [Oct 10] many times, but finally killed it.

In 1966 he bought a 17% share of the company for $400,000, and became Chairman of the Board, although Jack Tramiel [Dec 13] remained CEO. He also suggested that Commodore start manufacturing adding machines (they had been a typewriter company until then). Later, Tramiel came up with the idea to make calculators.

By 1975, Commodore had amassed losses of $5 million, so Gould stepped in again, with a loan of $3 million. Crucially, this money helped finance Commodore's 1976 purchase of MOS technologies [Sept 16], a key component of Tramiel's plans to move into home computers. A string of product successes followed (e.g. the Commodore Pet [April 15], the VIC-20 [May 00], and the Commodore 64 [Jan 7]).

Gould and Tramiel had a good working relationship until 1984 when Tramiel suddenly quit [Jan 16] after a blazing argument with Gould. Gould took over as CEO, which was perhaps a mistake since (as he admitted in 1988) he neither owned a computer nor know how to operate one. He replaced Tramiel with a quick succession of executives. Only Mehdi Ali, managing director from 1989, lasted more than a few years.

Gould and Ali made a series of poor decisions, including the mis-marketing of the Amiga line [July 23], and an emphasis on profits over product quality. Commodore went out of business in April 1994, having lost $374 million in its final 18 months.

In his spare time, Gould collected Netsuke, miniature Japanese carved sculptures. They served as fasteners to attach a pouch to a kimono sash since traditional Japanese clothing lacked pockets.

Jean Amédée Hoerni

Born: Sept. 26, 1924;

Geneva, Switzerland
Died: Jan. 12, 1997

In 1959 Hoerni invented a process for connecting the components of a transistor. The key insight was to view the circuit as a two-dimensional projection onto a plane, which allowed the application of photographic processing concepts to build up layers of the circuit onto a silicon wafer. This technique complemented Robert Noyce's [Dec 12] creation of integrated circuits from silicon rather than germanium (which had been Jack Kilby's [Nov 8] approach). And so the modern IC was born.

Although Kilby was awarded the 2000 Nobel Prize in physics for "his part in the invention of the integrated circuit", many historians include Robert Noyce [Dec 12], Kurt Lehovec [June 12], and Hoerni as co-inventors.

Hoerni was a member of the so-called 'Traitorous Eight" [Sept 18] who left Shockley Semiconductor lab to form Fairchild Semiconductor [Oct 1] in 1957.

Japanese Word

Sept. 26, 1978

Toshiba announced the JW-10, the first Japanese word processor. It was equipped with a 10 MB hard disk and a 24-dot serial Kanji printer, and cost ¥6.3 million.

The crucial innovation by Mori Kenichi's team at Toshiba was automatic Kana-to-Kanji conversion inside the device, which meant that the user could use the 50-character kana script to generate words in the much more complex 5,000-character kanji alphabet. This made typing much faster and required less training.

The JW-10. Photo by Dddeco. CC BY 2.5.

The user had to type in a word in kana and then press a conversion button to have the machine search an internal dictionary and bring the kanji for that word up onto the screen. When there was more than one possibility, the user could select the right word from a list. A maximum of 80,000 words could be stored in the dictionary.

A successor, the JW-5, was released in May 1980. It featured enhanced composition and editing capabilities, at a lower price of ¥2.6 million.

Motorola 68000 Introduced

Sept. 26, 1979

The Motorola 68000 was so named because the chip packed in 68,000 transistors, more than double the number in Intel's 8086 [June 8]. It was a hybrid design that utilized 32-bit registers, but cheaper 24-bit address and 16-bit data buses. However, it could easily be expanded to support 32-bit buses, which resulted in the 68020 [June 28].

The 68000 was also far faster than its contemporaries, which was essential as graphics-intensive programming, and particularly GUIs, moved into the mainstream. As a result, the 68000 was employed in Apple's Lisa [Jan 19], the Mac [Jan 24],

the Amiga 1000 [July 23], and the Atari ST [Jan 10].

The 68000 instruction set was also well suited for supporting UNIX, so became the dominant CPU for the UNIX-based Sun [May 00] and Apollo [Feb 13] workstations.

Even IBM had wanted to use the 68000 in its IBM PC [Aug 12], but Intel's 8088 [July 1]was the first to market.

The 68000 was probably the last major processor designed using pencil and paper. Nick Tredennick, who worked on its microcode and the controller core, told the story: "I circulated reduced-size copies of the flowcharts, execution-unit resources, decoders, and control logic to other project members. One day I came into my office to find a credit-card-size copy of the flowcharts sitting on my desk."

Self-driving Car

Sept. 26, 1982

The sci-fi action TV show "Knight Rider" premiered on NBC.

Detective Michael Long is given a new face (David Hasselhoff's) and name, and equipped with the cutting edge "Knight Industries Two-Thousand" (K.I.T.T.), an AI-enhanced 1982 Pontiac Firebird Trans Am. Its features included: Super Pursuit Mode, Auto Collision Avoidance, Emergency Eject, Ski Mode, a medical scanner, sonar, surveillance x-rays, and the calculation of female body dimensions. K.I.T.T was voiced by William Daniels.

K.A.R.R. ("Knight Automated Roving Robot", aka "The evil Trans Am") was a popular villain in the show. K.A.R.R.'s voice was supplied by Peter Cullen, probably best known as the voice of Optimus Prime in "The Transformers."

The show's producer, Glen A. Larson, had got the idea for K.I.T.T. from the movie "The Love Bug Rally" (1971).

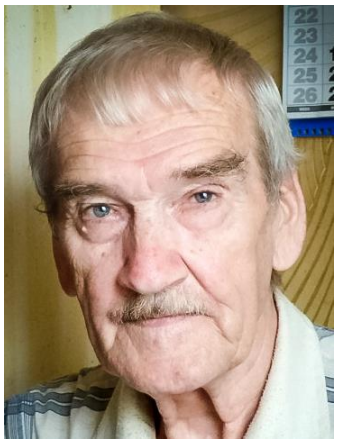
Google's work on self-driving cars was first made public by Sebastian Thrun [May 14] in a blog post on Oct. 9, 2010: "While this project is very much in the experimental stage, it provides a glimpse of what transportation might look like in the future thanks to advanced computer science." Obviously, Thrun was unaware that he had been beaten to the punch by some 30 years.

World War III Almost

Sept. 26, 1983

Stanislav Yevgrafovich Petrov, a lieutenant colonel in the Soviet Air Defense Forces, probably averted nuclear war on this day.

He was the officer on duty at the Serpukhov-15 bunker near Moscow which housed the command center for the Soviet early warning satellites.



Stanislav Petrov (2016). Photo by Queery-54. CC BY-SA 4.0.

Shortly after midnight, the bunker's computers reported that five intercontinental ballistic missile were heading toward the Soviet Union from the US. Petrov decided that the report was a computer error, since a first-strike was likely to involve hundreds of missiles not just five. Furthermore, the system's reliability had been questioned in the past.

Petrov dismissed the warning as a false alarm, and ordered his men to stand down. Fifteen minutes later, radar outposts confirmed that there were no incoming missiles.

The trigger for the near apocalypse was due to a fault in the software that was supposed to filter out false missile identifications caused by the satellites detecting sunlight reflecting off cloud-tops.

For a similar American incident, see [Nov 9].

DIMHRS

Sept. 26, 2003

The Defense Integrated Military Human Resources System within the US DoD was to be the largest resource planning program ever, bringing the four military branches under a single payroll and personnel records system. DIMHRS (pronounced dime-ers) was to subsume or replace over 90 legacy systems.

Development efforts began on this day when the DoD awarded Northrop Grumman a $281 million contract. At its peak, the project employed 600 military, federal, and private contractors, using commercial-off-the-shelf (COTS) based enterprise systems.

In Feb. 2010 Secretary of Defense Robert Gates and Chairman of the Joint Chiefs of Staff Michael Mullen announced the cancellation of the program. Mullen stated, "This program has been a disaster,"while Gates added, "Many of the programs that I have made decisions to cut have been controversial within the Department of Defense. This one was not."

An estimated $1 billion had been spent on the project.

Its demise left the Army, Navy and Air Force reliant on archaic, problem-plagued payroll and personnel systems. For example, the addition of new pay grades can take the Army an average of 12 to 18 months to automate. Some pay scales, such as medical bonuses, must be calculated manually.

Flashback Trojan

Sept. 26, 2011

The Flashback Trojan affected machines running Mac OS X [March 24], turning them into members of a botnet. It also grabbed passwords and other information through the machine's Web browser and applications such as Skype [Aug 29]. The first variant was discovered by antivirus company Intego on this day, pretending to be an Adobe Flash installer [Jan 6].

More than 600,000 Macs were eventually infected, including 274 in the Cupertino area, the home of Apple's HQ.